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GRADUATE STUDIES

The Faculty of Graduate Studies serves prospective and current graduate students from the moment they apply to the University to the time they receive their degrees at convocation. To do so, it provides oversight for all of the University's graduate programs and collaborates with individual units to ensure clarity and transparency of their program requirements and practices.

Important Notice

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

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

It is the responsibility of all students:

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

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

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

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

Students also agree by the act of registration to be bound by the regulations, policies, procedures, bylaws and rules of the University of Manitoba that are in effect at the time of registration, including any amendments which may be enacted during the period of their registration. Students agree by the act of registration to be bound by the regulations, policies, procedures, bylaws and rules of the faculty or program in which they have registered, including any amendments which may be made during the period of their registration. Students also acknowledge that such amendments may have retroactive application. Students also acknowledge that such regulations, policies, procedures, bylaws and rules will include, but are not limited to, those related to COVID-19 health and safety rules, protocols and processes.

No liability shall be incurred by the University of Manitoba for any loss or damage directly or indirectly suffered or incurred by any student, or any party claiming through or under any student, as a result of interruption or delays in, failure to provide or termination, of services, courses or classes arising out of cause or causes beyond its control including but not limited to acts of God, fires, floods, riots, wars, strikes or lockouts, mass casualty events, local, regional or global outbreak of disease or other public health emergency, social distancing or quarantine restriction, legislative or regulatory requirements, unusually severe weather, failure of public utility or common carrier, or attacks or other malicious acts, including but not limited to attacks on or through the internet, or any internet service, telecommunications provider or hosting facility, damage to university property, financial exigency, or any other occurrence beyond the control of the University. Further, the University of Manitoba shall not be liable for any losses or damage suffered by a student who discloses his/her personal identification number (PIN) to anyone other than a university employee in the course of registration.

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

a. the continued spread of or exposure to the Virus;

b. the continuation of or renewed Governmental Response to control the spread of the Virus; and

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

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

Freedom of Information and Protection of Privacy Act (FIPPA)

This personal information is being collected under the authority of The University of Manitoba Act. It will be used for the purposes of admission, registration, assessment of academic status, and communication with the student. It may be used for administrative research in support of provision of education and general administration of the University. It may be disclosed to other educational institutions, government departments, and co-sponsoring organizations, and, for those students who are members of UMSU, it will be disclosed to the University of Manitoba Students' Union. Upon graduation, the student's name and

address, together with information on degrees, diplomas, and certificates earned will be given to and maintained by the alumni records department in order to assist the University's advancement and development efforts. Information regarding graduation and awards may be made public. Personal information will not be used or disclosed for other purposes, unless permitted by The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection of personal information, contact the Access and Privacy Office (tel. 204-474-9844),

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

Disclosure of Personal Information to Statistics Canada

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

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

About the University

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

University Administration (http://umanitoba.ca/admin/)

Organizational Structure

Senior Administrative Officers

President and Vice-Chancellor

Michael Benarroch, B.A. (Hons), M.A., Ph.D.

Vice-President (Administration)

Naomi Andrew, B.A. (Advanced), LL.B.

Provost and Vice-President (Academic)

Diane Hiebert-Murphy, B.S.W, M.A., Ph.D., C.Psych.

Vice-President (Research)

B. Mario Pinto, B.Sc., Ph.D., FRSC

Vice-President (External)

Vanessa Koldingnes, B.A., M.B.A.

Vice-President (Indigenous)

Catherine Cook, M.D., M.Sc., C.C.F.P., F.C.F.P.

University Secretary

Jeffrey M. Leclerc, B.Ed. M.Ed., C.Dir.

Vice-Provosts

Greg Smith, B.A. (Hons), M.A., Ph.D.

Laurie Schnarr, M.A.

Lisa O'Hara, B.A., M.L.I.S.

Mark Torchia, M.Sc., Ph.D.

Peter Nickerson, M.D., FRCPC, FCAHS

Tracey Peter, Ph.D.

Associate Vice-Presidents

Annemieke Farenhorst, Ph.D., D.R.S.

Cary Miller, Ph.D.

Christine Cyr, B.A.

Hans-Joachim Wieden, Ph.D.

Raman Dhaliwal, B.Comm. (Hons.)

Rene Ouellettè, B.A., B.Comm

Stephanie Levene, M.B.A.

University Librarian

Lisa O'Hara, B.A., M.L.I.S.

Officers of the Board of Governors

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Lynette Magnus, B.Comm. (Hons.), C.P.A., C.A.

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Anne Mahon, B.H.Ecol.

President and Vice-Chancellor

Michael Benarroch, B.A. (Hons.), M.A., Ph.D.

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Tracy Ayebare Karuhogo

University Secretary

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Affiliated, Member and Constituent Colleges

St. Andrew's College

Acting Principal: Very Rev. Fr. Roman Bozyk, B.A., M.Div., M.A., Ph.D.

Université de Saint-Boniface

Rectrice: Sophie Bouffard, M.Mus. (Laval), Ph.D. (Musicology) (Regina)

St. John's College

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

St. Paul's College

Rector: Christopher Adams, Ph.D.

Approved Teaching Centres

William and Catherine Booth College

Prairie Theatre Exchange

Distinguished Professors

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

Distinguished Professors Emeritus

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

Chancellors Emeriti

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

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

Presidents Emeriti

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

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

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

Faculties/Schools and Departments

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

Faculties/Schools	Departments
Agricultural and Food Sciences (Faculty 07; School 24)	Agribusiness and Ageconomics (061)
	Animal Science (035)
	Biosystems Engineering (034)
	Entomology (038)

	Food Science (078)
	General Agriculture (065)
	Plant Science (039)
	Soil Science (040)
	Human Nutritional Science (030)
Architecture (09)	Architecture (050)
	Architecture Interdisciplinary/ Design and Planning (166)
	City Planning (073)
	Environmental Design (079)
	Interior Design (051)
	Landscape Architecture (031)
Art (15)	Fine Arts (054)
Arts (01)	Anthropology (076)
	Arts Interdisciplinary (099)
	Asian Studies (150)
	Canadian Studies (151)
	Catholic Studies (160)
	Central and East European Studies (099S)
	Classics (003)
	Economics (018)
	English, Film, and Theatre (004)
	French, Spanish and Italian (044)
	German and Slavic Studies (008)
	Global Political Economy (157)
	History (011)
	Icelandic (012)
	Judaic Studies (055)
	Labour Studies (153)
	Linguistics (126)
	Indigenous Studies (032)
	Philosophy (015)
	Political Studies (019)
	Psychology (017)
	Religion (020)
	Sociology (077)
	Ukrainian Canadian Heritage Studies (155)
	Women's and Gender Studies (156)
Education (08)	Curriculum, Teaching and Learning (132)
	Disability Studies (162)
	Educational Administration, Foundations and Psychology (129)
	Education Ph.D. (124)
Engineering (03)	Civil Engineering (023)
	Electrical and Computer Engineering (024)
	Engineering - Preliminary Year (130)
	Mechanical (025)
	Engineering (025)
Environment, Earth, and Resources, Clayton H. Riddell (028)	Geological Sciences (007)
	Environment and Geography (128)
	Environment, Earth, and Resources (177)
	Resource Management (056)
Extended Education (26)	
Graduate Studies (016)	Graduate Studies (069)
	Mauro Centre for Peace Studies (170)
Health Sciences (29)	General Human Ecology (028)
	Health Sciences (173)
	Health Studies (173)
Dentistry (17)	Dental Diagnostic and Surgical Sciences (103)
	Dentistry (066)
	Oral Biology (100)
	Preventative Dental Science (101)
	Restorative Dentistry (102)
Dental Hygiene (20)	Dental Hygiene (070)
Medicine (05)	Anaesthesia (096)
	Biochemistry and Medical Genetics (137)
	Community Health Sciences (093)
	Family Social Sciences (062)
	Human Anatomy and Cell Science (080)
	Immunology (072)
	Interdisciplinary Medicine (165)
	Medical Education (888)
	Medical Microbiology and Infectious Diseases (097)
	Medicine (083)
	Pathology (088)
	Pharmacology (089)
	Psychiatry (091)
	Physiology (090)
	Surgery (094)
Nursing (13)	Midwifery (049)
	Nursing (049)
Pharmacy (11)	Pharmacy (046)
Rehabilitation Sciences (19)	Medical Rehabilitation (068)
	Occupational Therapy (168)
	Physical Therapy (167)
	Respiratory Therapy (169)
Kinesiology and Recreation Management (22)	Kinesiology (171)
	Physical Education (057)
	Physical Education & Recreation Studies General (172)
	Recreation Studies (123)
Law (10)	Law (045)
Management, I. H. Asper School of Business (06)	Accounting and Finance (009)

	Actuarial Studies, Warren Centre (010)
	Business Administration (027)
	Interdisciplinary Management (098)
	Marketing (118)
	Supply Chain Management (164)
Music, Marcel A. Desautels (21)	Music (033)
Science (02)	Biological Sciences (071)
	Chemistry (002)
	Computer Science (074)
	Data Science (178)
	Mathematics (136)
	Microbiology (060)
	Physics and Astronomy (016A)
	Statistics (005)
Social Work (12)	Social Work (047)
University 1 (27)	

Alphabetical Listing of Subjects

Subject	Code	Faculty/School
Accounting	ACC	Management
Actuarial Studies Warren Centre	ACT	Management
Agribusiness and Ageconomics	ABIZ	Agricultural and Food Sciences
Agroecology	AGEC	Agricultural and Food Sciences
Agriculture	AGRI	Agricultural and Food Sciences
Agriculture Diploma	DAGR	Agricultural and Food Sciences
American Sign Language	ASLL	Arts
Anatomy	ANAT	Medicine
Anesthesia	ANES	Medicine
Animal Science	ANSC	Agricultural and Food Sciences
Anthropology	ANTH	Arts
Applied Mathematics	AMAT	Science
Arabic	ARA	Arts
Architecture	ARCG	Architecture
Architecture Interdisciplinary	ARCH	Architecture
Arts Interdisciplinary	ARTS	Arts
Asian Studies	ASIA	Arts
Astronomy	ASTR	Science
Biochemistry and Medical Genetics	BGEN	Medicine
Biological Sciences	BIOL	Science
Biosystems Engineering	BIOE	Agricultural and Food Sciences
Biomedical Engineering	BME	Engineering
Biotechnology	BTEC	Science
Canadian Studies	CDN	Arts
Catholic Studies	CATH	Arts
Chemistry	CHEM	Science
City Planning	CITY	Architecture
Civil Engineering	CIVL	Engineering
Classics	CLAS	Arts
Community Health Sciences	CHSC	Medicine
Computer Science	COMP	Science
Data Science	DATA	Science
Dental Diagnostic and Surgical	DDSS	Dentistry
Dental Hygiene	HYGN	Dental Hygiene
Dentistry	DENT	Dentistry
Diagnostic Cytology	CYTO	Medical Rehabilitation
Diploma in Agriculture	AGRI	Agricultural and Food Sciences
Disability Studies	DS	Disability Studies
Economics	ECON	Arts
Education Ph.D.	EDUC	Education
Educational Administration, Foundations and Psychology	EDUA	Education
Education: Curriculum, Teaching and Learning	EDUB	Education
Electrical Engineering	ECE	Engineering
Engineering - Preliminary Year	ENG	Engineering
English	ENGL	Arts
Entomology	ENTM	Agricultural and Food Sciences
Entrepreneurship/Small Business	ENTR	Management
Environment	ENVR	Environment, Earth, and Resources
Environment, Earth, and Resources	EER	Environment, Earth, and Resources
Environmental Architecture	EVAR	Architecture
Environmental Design	EVDS	Architecture
Environmental Interior Environment	EVIE	Architecture
Environmental Landscape and Urbanism	EVLU	Architecture
Family Social Sciences	FMLY	Medicine
Film Studies	FILM	Arts
Finance	FIN	Management
Fine Art General Courses	FA	Art
Fine Art Diploma	FNDP	Art
Fine Art: Art History	FAAH	Art
Fine Art Studio Courses	STDO	Art
Food Science	FOOD	Agricultural and Food Sciences

Forensic Sciences	FORS	Science
French	FREN	Arts
General Agriculture	AGRI	Agricultural and Food Sciences
General Human Ecology	HMEC	Human Ecology
General Management	GMGT	Management
Geography	GEOG	Environment, Earth, and Resources
Geological Sciences	GEOL	Environment, Earth, and Resources
German	GRMN	Arts
Global Political Economy	GPE	Arts
Graduate Studies	GRAD	Graduate Studies
Greek	GRK	Arts
Health Studies	HEAL	Health Sciences
Hebrew	HEB	Arts
History	HIST	Arts
Human Nutritional Sciences	HNSC	Agricultural and Food Sciences
Human Resources Manage- ment/ Industrial Relations	HRIR	Management
Icelandic	ICEL	Arts
Immunology	IMMU	Medicine
Indigenous Studies	INDG	Arts
Interdisciplinary Management	IDM	Management
Interdisciplinary Medicine	IMED	Medicine
Interior Design	IDES	Architecture
International Business	INTB	Management
Italian	ITLN	Arts
Judaic Studies	JUD	Arts
Kinesiology	KIN	Kinesiology and Recreation Management
Kinesiology, Phys.Ed and Recreation	KPER	Kinesiology, Phys.Ed and Recreation
Labour and Workplace Studies	LABR	Arts
Landscape Architecture	LARC	Architecture
Latin	LATN	Arts
Law	LAW	Law
Linguistics	LING	Arts
Management Information Systems	MIS	Management
Management Science	MSCI	Management
Marketing	MKT	Management
Mathematics	MATH	Science
Mechanical Engineering Graduate	MECG	Engineering
Mechanical Engineering Undergraduate	MECH	Engineering
Medical Microbiology and Infectious Diseases	MMIC	Medicine
Medical Rehabilitation	REHB	Medical Rehabilitation
Medicine	MED	Medicine
Microbiology	MBIO	Science
Midwifery	MDFY	Nursing
Music	MUSC	Music
Native Studies	NATV	Arts
Nursing	NURS	Nursing
Occupational Therapy	OT	Medical Rehabilitation
Operations Management	OPM	Management
Oral Biology	ORLB	Dentistry
Pathology	PATH	Medicine
Peace Studies	PEAC	Graduate Studies
Pharmacology	PHAC	Medicine
Pharmacy	PHRM	Pharmacy
Pharmacy	PHMD	Pharmacy
Philosophy	PHIL	Arts
Physical Education	PHED	Kinesiology and Recreation Management
Physical Education and Recreation Studies General	PERS	Kinesiology and Recreation Management
Physical Therapy	PT	Medical Rehabilitation
Physics	PHYS	Science
Physiology	PHGY	Medicine
Plant Science	PLNT	Agricultural and Food Sciences
Polish	POL	Arts
Political Studies	POLS	Arts
Post Graduate Medical Education	PGME	Medicine
Preventive Dental Science	PDSD	Dentistry
Psychiatry	PCTY	Medicine
Psychology	PSYC	Arts
Recreation	REC	Kinesiology and Recreation Management
Religion	RLGN	Arts
Resource Management	NRI	Environment, Earth, and Resources
Respiratory Therapy	RESP	Medical Rehabilitation
Restorative Dentistry	RSTD	Dentistry
Russian	RUSN	Arts
Semitic Languages and Literature	SEM	Arts
Slavic Studies	SLAV	Arts
Social Work	SWRK	Social Work
Sociology	SOC	Arts
Soil Science	SOIL	Agricultural and Food Sciences

Spanish	SPAN	Arts
Statistics	STAT	Science
Supply Chain Management	SCM	Management
Surgery	SURG	Medicine
Textile Sciences	TXSC	Agriculture
Theatre	THTR	Arts
Ukrainian	UKRN	Arts
Ukrainian Cdn. Heritage	UCHS	Arts
Undergraduate Medical Education	UGME	Medicine
Women's Studies	WOMN	Arts
Yiddish	YDSH	Arts

Academic Schedule

Academic Schedule Fall/Winter Term 2023-2024

Dates Applicable to all U of M Students

University Closure

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

Event	Date
Canada Day	July 3, 2023
Terry Fox Day (Civic Holiday)	August 7, 2023
Labour Day	September 4, 2023
National Day for Truth and Reconciliation	October 2, 2023
Thanksgiving Day	October 9, 2023
Remembrance Day	November 13, 2023
Winter Holiday	December 23, 2023 to January 2, 2024
Louis Riel Day	February 19, 2024
Good Friday	March 29, 2024
Victoria Day	May 20, 2024
Canada Day (Holiday Observed)	July 1, 2024
Terry Fox Day (Civic Holiday)	August 5, 2024

Dates Applicable to most U of M Students

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

Orientation

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

Event	Date
Welcome Day Fall Term	Sept 5, 2023
Welcome Day Winter Term	Jan 5, 2024
Faculty of Architecture	August 25, 2023 (subject to change)
Faculty of Kinesiology and Recreation Management	July 6 and 11, 2023

Start and End Dates

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

Event	Date
Fall Term	September 6 to December 11, 2023
Winter Term (no classes, examinations or tests will be held March 29, 2024)	January 8 to April 10, 2024
Winter/Summer Term spanning distance and online courses	January 8 to July 4, 2024

Registration and Withdrawal Dates

Additional or differing dates exist for: Agriculture Diploma, Dental Hygiene, Dentistry, Pharmacy, Physical Therapy and other faculties, colleges and/or schools offering irregularly scheduled courses. Agriculture Diploma, Dental Hygiene, Dentistry, Pharmacy, Physical Therapy students should also see their respective section of the Academic Schedule; all others should also refer to the Class Schedule (https://aurora.umanitoba.ca/banprod/bwckschd.p_disp_dyn_sched/).

Regular Registration Period

Event	Date
Fall Term and Fall/Winter Term classes	Ends September 5, 2023
Winter Term classes and Winter / Summer Term spanning distance and online courses	Ends January 7, 2024

Registration Revision Period

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

Event	Date
Fall Term and Fall/Winter Term classes	September 6 to 20, 2023
Winter Term classes and Winter/ Summer Term spanning distance and online courses	January 8 to 22, 2024

Last Date to Drop without Penalty

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

Event	Date
Fall Term	September 19, 2023
Fall/Winter Term classes Part A	September 19, 2023
Fall/Winter Term classes Part B (VW recorded if dropped after Sept 18, 2023)	January 20, 2024
Winter Term classes and Winter/Summer Term spanning distance and online courses	January 19, 2024

Last Date to Register/Registration Revision Deadline

Event	Date
Fall Term and Fall/Winter Term classes	September 20, 2023
Winter Term classes and Winter/Summer Term spanning distance and online courses	January 22, 2024

Voluntary Withdrawal (VW) Deadline

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

Event	Date
Fall Term classes	November 21, 2023
Fall/Winter Term spanning classes	January 19, 2024
Winter Term classes	March 20, 2024
Winter/Summer Term spanning distance and online courses	May 16, 2024

Fee Payment Deadlines

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

Event	Date
Fall Term	October 4, 2023
Winter Term	February 6, 2024

* Please see Last Day to Drop without Penalty

Term Breaks

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

Event	Date
Fall Term Break (The U of M will be closed Friday November 13 for Remembrance Day)	November 13 to 17, 2023
Winter Term Break (The U of M will be closed Monday February 19 for Louis Riel Day)	February 19 to 23, 2024

Examination and Test Dates

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

Event	Date
Fall Term (includes tests and mid term exams for Fall/Winter Term classes)	December 12 to 22, 2023
Winter Term (includes final exams for Fall/Winter Term classes)	April 12 to 26, 2024

Challenge for Credit Application Deadline

Event	Date
For classes offered Fall Term 2023 and spanning Fall/Winter 2023-2024	September 20, 2023
For classes offered Winter Term 2024	January 22, 2024

Final Grade Appeal Deadlines

Event	Date
For Final grades received for Fall Term 2023 classes	January 26, 2024
For final grades received for Winter Term 2024 and Fall 2023/Winter 2024 classes	June 10, 2024

Graduation and University Convocation

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

For students graduating Fall 2023

Event	Date
Deadline to apply online to graduate for most Undergraduate students	July 27, 2023
Faculty of Graduate Studies Submission Deadline*	August 24, 2023
Convocation Ceremony (Fort Garry Campus)	October 17 to 19, 2023
Convocation Ceremony (Bannatyne Campus)	October 26, 2023

For students graduating February 2024

Event	Date
Deadline to apply online to graduate for most Undergraduate students	September 19, 2023
Faculty of Graduate Studies Submission Deadline*	January 4, 2024
Graduation date for students graduating in February	February 7, 2024

Convocation Ceremony (Fort Garry Campus)	June 4 to 7, 2024

For students graduating Spring 2024

Event	Date
Deadline to apply online to graduate for most Undergraduate students	January 19, 2024
Faculty of Graduate Studies Submission Deadline*	March 28, 2024
Convocation Ceremony (Bannatyne Campus)	May 16, 2024
Convocation Ceremony (Fort Garry Campus)	June 4 to 7, 2024
Convocation Ceremony - Université de Saint-Boniface	June 10, 2024
Graduate Studies Submission Deadline* for students graduating Fall 2022	August 27, 2024
Annual Traditional Graduation Pow Wow in honour of Indigenous graduates	May 4, 2024

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

Dates Applicable to Agriculture Diploma

Orientation

Event	Date
Orientation	September 7 to 8, 2023

Start and End Dates

Event	Date
Fall Term	September 11 to December 8, 2023
Experiential Learning	October 10 to 13, 2023 (subject to change)
Winter Term	January 8 to April 5, 2024
Experiential Learning	January 18, 22 to 24, 2024 (subject to change)

Registration and Withdrawal Dates

Regular Registration Period

Event	Date
Fall Term and Fall/Winter Term classes	Ends September 10, 2023
Winter Term Classes	Ends January 7, 2024

Late Registration/Registration Revision Period

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

Event	Date
Fall Term and Fall/Winter Term classes	September 11 to 22, 2023
Winter Term Classes	January 8 to 25, 2023

Last Day to Drop without Penalty

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

Event	Date
Fall Term and Fall/Winter Term classes	September 21, 2023
Winter Term Classes	January 19, 2024

Last Date to Register/Registration Revision Deadline

Event	Date
Fall Term and Fall/Winter Term classes	September 22, 2023
Winter Term Classes	January 25, 2024

Voluntary (VW) Withdrawal deadline

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

Event	Date
Fall Term classes	November 21, 2023
Winter Term and Fall/Winter Term classes	March 18, 2024

Examination and Test Dates

Event	Date
Fall Term (includes tests and midterms exams for Fall/Winter Term classes)	December 11 to 21, 2023
Winter Term (includes final exams for Fall/Winter Term classes)	April 8 to 17, 2024

Dates applicable to Art (School of)

Important Dates

Event	Date
First Year Field Trip	TBD

Dates applicable to Dental Hygiene

Orientation

Event	Date
Year 2 and 3	January 4 to 5, 2024

Start and End Dates

Event	Date
Year 2	
Fall Term Classes	August 21 to December 1, 2023
Fall Term Clinics	September 21 to December 8, 2023
Winter Term Classes	January 9 to April 12, 2024
Winter Term Clinics	January 8 to April 12, 2024
Year 3	
Fall Term Classes	August 14 to December 1, 2023
Fall Term Clinics	August 28 to December 8, 2023
Winter Term Classes	January 8 to April 26, 2024
Winter Term Clinics	January 8 to April 19, 2024

Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 2	
Fall Term	September 5, 2023
Winter Term	January 22, 2024
Year 3	
Fall Term	August 28, 2023
Winter Term	January 22, 2024

Voluntary Withdrawal (VW) deadline

Event	Date
Year 2	
Fall Term	November 6, 2023
Winter Term	March 25, 2024
Year 3	
Fall Term	November 6, 2023
Winter Term	April 1, 2024

Term Breaks

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

Event	Date
Fall Term Break	N/A
Winter Term Break	February 26 to March 1, 2024

Examination and Test Dates

Event	Date
Year 2	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	December 4 to 15, 2023
Winter Term	April 8 to 12, 2024
Year 3	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	December 11 to 15, 2023
Winter Term	April 15 to 19, 2024

Convocation Ceremony

Event	Date
Bannatyne Campus	May 16, 2024

Dates applicable to Dentistry (including International Dentist Degree Program)

Start and End Dates

Event	Date
Years 1 and 2	
Fall Term Classes	August 14 to December 1, 2023
Fall Term Clinics	September 5 to December 1, 2023
Winter Term Classes and Clinics	January 3 to May 3, 2024
Year 3/IDDP 1	
Fall Term Classes	August 8 to December 1, 2023
Fall Term Clinics	September 5 to December 8, 2023
Winter Term Classes and Clinics	January 3 to May 3, 2024
Year 4/IDDP 2	
Fall TermClasses	August 8 to December 1, 2023
Fall Term Clinics	September 5 to December 8, 2023
Winter Term Classes and Clinics	January 3 to April 26, 2024

Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 1 & 2	
Fall Term	August 28, 2023
Winter Term	January 24, 2024
Years 3 & 4	
Fall Term	August 29, 2023
Winter Term	January 24, 2024

Voluntary Withdrawal (VW) deadline

Event	Date
Years 1 and 2	
Fall Term	November 6, 2023
Winter Term	April 10, 2024
Year 3	
Fall Term	November 7, 2023
Winter Term	April 10, 2024
Year 4	
Fall Term	November 7, 2023
Winter Term	April 3, 2024

TERM BREAKS

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

Event	Date
Fall Term Break	N/A
Winter Term Break	February 26 to March 1, 2024

Examination and Test Dates

Event	Date
Years 1,2 and 3/IDDP 1	
Fall Term (includes tests and midterm exams for Fall/Winter term classes)	December 4 to 15, 2023
Winter Term	May 6 to 17, 2024
Year 4/IDDP 2	
Fall Term (includes tests and midterm exams for Fall/Winter Term classes)	December 11 to 15, 2023
Winter Term	January 8 to 12, 2024

Convocation Ceremony

Event	Date
Bannatyne Campus	May 16, 2024

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

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

Orientation

Event	Date
All students	September 1, 2023

Start and End Dates

Note: Practicum dates may vary by practicum placement.

Event	Date
Fall Term	
Practicum Block	September 5 to 8, 2023
Practicum Mondays	September 11, 18, 25, October 23, 30, 2023
Day Classes	September 12 to November 10, 2023
MTS PD Day	October 20, 2023
Program Day	November 6, 2023
Practicum Block	November 20 to December 19, 2023
Winter Term	
Program Day	January 8, 2024
Practicum Mondays	January 15, 22, 29, February 5, 12, 26, March 4, 11, 2024
Day Classes	January 9 to March 15, 2024
Practicum Block	March 18 to 22, April 1 to 24, 2024

Term Breaks

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

Event	Date
Fall Term Break (Note: Dates may vary by practicum placement)	see Date Applicable to most U of M students
Winter Term Break	see Dates Applicable to most U of M students
Winter Practicum Break (Note: Dates may vary by school division and/or practicum placement)	March 25 to 29, 2024

Examination and Test Dates

Event	Date
Fall Term (as required)	November 18, 2023
Winter Term (as required)	March 16, 2024

Dates applicable to Management (Graduate Level)

Orientation (M.B.A., M.Fin., and M.S.C.M.)

Event	Date
Fall Term	Early August 2023

Start and End Dates (M.B.A., M.Fin., and M.S.C.M.)

Event	Date
Fall Term	August 1 to December 21, 2023
Winter Term	January 3 to April 10, 2024

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

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

Orientation

Event	Date
Year 1	Aug 22 to 25, 2023
Year 3	TBD

Start and End Dates

Event	Date
Year 1	
Fall Term	August 28 to December 22, 2023
Winter Term	January 8 to May 31, 2024
Rural Week	May 27 to 31, 2024
Year 2	
Fall Term	August 28 to December 22, 2023
Winter Term	January 8 to May 24, 2024
Year 3	
Fall Term	TBD
Winter Term	TBD
Year 4	
Fall Term	TBD
Winter Term	TBD

Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 1	
Fall Term	September 12, 2023
Winter Term	January 29, 2024
Year 2	
Fall Term	September 18, 2023
Winter Term	January 29, 2024

Voluntary Withdrawal (VW) deadline

Event	Date
Year 1	
Fall Term	November 28, 2023
Winter Term	April 22, 2024
Year 2	
Fall Term	November 27, 2023
Winter Term	April 15, 2024

Term Breaks

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

Event	Date
Year 1 & 2	
Fall Term Break	N/A
Winter Term Break	March 18 to 22, 2024
Year 3 & 4	
Fall & Winter Term Break	TBD

Examination and Test Dates N/A

Convocation Ceremony

Event	Date
Bannatyne Campus	May 16, 2024

Dates applicable to Nursing

Orientation

Event	Date
Fall Term	August 29 to 30, 2023
Winter Term	December 13 to 14, 2024
Summer Term	April 23 to 24, 2024
Midwifery	TBD

Start and End Dates

Event	Date
Year 4 Classes	Dates vary, see class schedule
Nursing Practice 1 to 7	Dates vary, see class schedule
Midwifery Classes	Dates vary, see class schedule
Midwifery Clinical Practice	Dates vary, see class schedule

Dates applicable to Occupational Therapy

Orientation

Event	Date
Year 1	August 28 to 29, 2023
Year 2	August 28, 2023

Start and End Dates

Event	Date
Year 1	
Fall Term Classes	August 28 to November 17, 2023
Basic Fieldwork	November 20 to December 15, 2023
Winter Term Classes	January 4 to April 26, 2024
Year 2	
Fall Term Classes	August 28 to December 15, 2023
Intermediate Fieldwork 2	January 2 to February 23, 2024
Winter Term Classes	March 4 to June 21, 2024

Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 1	
Fall Term	September 11, 2023
Winter Term	January 18, 2024
Year 2	
Fall Term	September 11, 2023
Winter Term	March 18, 2024

Voluntary Withdrawal (VW) Deadline

Event	Date
Year 1	
Fall Term	October 30, 2023
Winter Term	March 28, 2024
Year 2	
Fall Term	November 20, 2023
Winter Term	May 27, 2024

Term Breaks

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

Event	Date
Fall Term Break	N/A
Winter Term Break	February 26 to March 1, 2024

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

Convocation Ceremony

Event	Date
Bannatyne Campus	October 26, 2023

Dates applicable to Pharmacy

Orientation

Event	Date
Year 1	August 28, 2023

Start and End Dates

Event	Date
Year 1	
Fall Term Classes	August 29 to December 11, 2023
Winter Term Classes	January 8 to April 12, 2024
Year 2	
Fall Term Classes	August 28 to December 4, 2023
IPPE Community	January 2 to 26, 2024
Winter Term Classes	January 29 to May 3, 2024
Year 3	
Fall Term Classes	September 5 to December 11, 2023
Winter Term Classes	January 8 to April 12, 2024
Year 4	
Block 3 APPE Rotations	August 28 to October 20, 2023
Block 3 Research Project	August 28 to December 15, 2023
Block 4 APPE Rotations	October 23 to December 15, 2023
Block 4 Research Project	January 2 to April 19, 2024
Block 5 APPE Rotations	January 2 to February 23, 2024
Block 6 APPE Rotations	February 26 to April 19, 2024

Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 1	
Fall Term	September 18, 2023
Winter Term	January 22, 2024
Year 2	
Fall Term	September 11, 2023
Winter term	February 12, 2024
Year 3	
Fall Term	September 18, 2023
Winter Term	January 22, 2024
Year 4	see course schedule

Voluntary Withdrawal (VW) Deadline

Event	Date
Year 1	
Fall Term	November 20, 2023
Winter Term	March 25, 2024
Year 2	

Fall Term	November 13, 2023
Winter Term	April 15, 2024
Year 3	
Fall Term	November 20, 2023
Winter Term	March 25, 2024
Year 4	see course schedule

Term Breaks

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

Event	Date
Year 1 & 3	Please refer to Dates Applicable to most U of M students
Year 2	
Fall	Please refer to Dates Applicable to most U of M students
Winter	March 11 to 15, 2024
Year 4	N/A

Examination & Test Dates

Event	Date
Year 1	
Fall Term Exams	Please refer to Dates Applicable to most U of M students
Winter Term Exams	April 15 to 26, 2024
Year 2	
Fall Term Exams	December 5 to 15, 2023
Winter Term Exams	May 6 to 17, 2024
Year 3	
Fall Term Exams	Please refer to Dates Applicable to most U of M students
Winter Term Exams	April 15 to 26, 2024

Convocation Ceremony

Event	Date
Bannatyne Campus	May 16, 2024

Dates applicable to Physical Therapy

Event	Date
Orientation	N/A

Start and End Dates

Event	Date
Year 1	
Fall Term Classes	August 8 to December 22, 2023
Winter Term Classes	January 3 to March 22, 2024
Clinical Placement	1x6 week placement and 1x6 week online learning between April 2 to August 2, 2024
Year 2	
Fall Term Classes	August 8 to September 29, 2023
Clinical Placement	2x6 week placements between October 2 to December 22, 2023
Winter Term Classes	January 3 to March 22, 2024
Clinical Placement	2x6 week placement between April 2 to August 2, 2024

Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 1	
Fall Term	August 29, 2023
Winter term	January 17, 2024
Year 2	
Fall Term	August 15, 2023
Winter term	January 17, 2024

Voluntary Withdrawal (VW) Deadline

Event	Date
Year 1	
Fall Term	November 21, 2023
Winter Term	March 6, 2024
Year 2	
Fall Term	September 19, 2023
Winter Term	March 6, 2024

Term Breaks

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

Event	Date
Fall Term Break	N/A
Winter Term Break	March 25 to 29, 2024

Convocation Ceremony

Event	Date
Bannatyne Campus	October 26, 2023

Dates applicable to Physician Assistant Studies

Orientation

Event	Date
Clinical Year	August 21 to 25, 2023
Academic Year	August 28 to September 5, 2023

Start and End Dates

Event	Date
Fall Term Academic Year	September 6 to December 8, 2023
Winter Term	January 3 to April 5, 2024
Fall Term Clinical Rotations	Starts August 28, 2023
Winter Term Clinical Year 2 Rotations	Starts January 2, 2024

Term Breaks

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

Convocation Ceremony

Event	Date
Bannatyne Campus	October 26, 2022

Dates applicable to Respiratory Therapy

Orientation

Event	Date
Year 1	August 31 to September 1, 2023
Year 3	August 24, 2023

Start and End Dates

(Includes clinical placement and classes)

Event	Date
Year 1	
Fall Term	September 5 to December 22, 2023
Winter Term	January 8 to April 26, 2024
Winter Term Clinical Placement	Starts May 6, 2024
Year 2	
Fall Term	September 5 to December 22, 2023
Winter Term	January 8 to May 31, 2024
Winter Term Clinical Placement	Starts June 3, 2024
Year 3	
Fall Term	August 25 to December 22, 2023
Fall Term Clinical Placement	Starts August 28, 2023
Winter Term	January 8 to May 31, 2024
Winter Term Clinical Placement	Starts January 8, 2024

Note: Year 3 is mostly Clinical Placement. The month of May involves academic activities such as simulation and exams.

Registration and Withdrawal Dates

Last Date to Drop without Penalty

Event	Date
Year 1	
Fall Term	September 19, 2023
Winter Term	January 22, 2024
Year 2	
Fall Term	September 19, 2023
Winter Term	January 22, 2024
Year 3	
Fall Term	September 15, 2023
Winter Term	January 29, 2024

Voluntary Withdrawal (VW) Deadline

Event	Date
Year 1	
Fall Term	November 28, 2023
Winter Term	March 25, 2024
Year 2	
Fall Term	November 28, 2023
Winter Term	March 25, 2024
Year 3	
Fall Term	November 24, 2023
Winter Term	April 22, 2024

Term Breaks

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

Event	Date
Fall Term Break	N/A
Winter Term Break	
Year 1 and 2	Please refer to Dates Applicable to most U of M students
Year 3	N/A

Convocation Ceremony

Event	Date
Bannatyne Campus	October 26, 2023

Dates applicable to Social Work

Orientation

Event	Date
Fort Garry, Inner City Field Instruction Orientation	September 5, 2023

Start and End Dates

Field Instruction*

Event	Date
Field Instruction	
Fall Term	September 5 to December 15, 2023
Winter Term	January 8 to April 19, 2024

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

Dates applicable to Master of Social Work in Indigenous Knowledge

ORIENTATION

Event	Date
Orientation Date	May 15, 2024

START AND END DATES

Event	Date
Fall Term	August 21, 2023 to December 8, 2023
Winter Term	January 8, 2024 to April 15, 2024
Summer Term	April 22, 2024 to June 24, 2024

TERM BREAK

Event	Date
Fall Term Break	November 27, 2023 to December 1, 2023
Winter Term Break	February 19, 2024 to February 23, 2024

Dates for Summer Term 2024

Start and End Dates (Generally Monday to Thursday classes)

Classes on Monday, May 20th will be made up on Friday, May 24th

Classes on Monday, July 1st will be made up on Friday July 5th

Classes on Monday, August 5th will be made up on Friday, August 9th

May - August courses will have no classes scheduled Monday, June 17th to Friday, June 28th

Event	Date
May - June	May 6 to June 13, 2024 - 6 hours instruction/week
July - August	July 1 to August 9, 2024 - 6 hours instruction/week
May - August (3 credits)	May 6 to August 9, 2024 - 3 hours instruction/week
May - August (6 credits)	May 6 to August 9, 2024 - 6 hours instruction/week

Registration and Withdrawal Dates

Regular Registration Period

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

Event	Date
May - June	Ends May 5, 2024
July - August	Ends June 30, 2024
May - August (3 credits)	Ends May 5, 2024
May - August (6 credits)	Ends May 5, 2024

Late Registration/Registration Revision Period

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

Event	Date
May - June	May 6 to May 9, 2024
July - August	July 1 to July 5, 2024
May - August (3 credits)	May 6 to May 16, 2024
May - August (6 credits)	May 6 to May 9, 2024

Last Date to Drop without Penalty

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

Event	Date
May - June	May 9, 2024
July - August	July 5, 2024
May - August (3 credits)	May 16, 2024
May - August (6 credits)	May 9, 2024

Voluntary Withdrawal (VW) deadline

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

Event	Date
May - June	June 4, 2024
July - August	July 30, 2024
May - August (3 credits)	July 18, 2024
May - August (6 credits)	July 18, 2024

Fee Payment Deadlines

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

Examination and Test Dates

Students are reminded that they must remain available until all examination and test obligations have been fulfilled.

Event	Date
Winter/Summer Term Spanning distance and online courses	July 5 to 8, 2024
May - June	June 17 to 22, 2024
July - August	August 12 to 17, 2024
May - August (3 credits)	August 12 to 17, 2024
May - August (6 credits)	August 12 to 17, 2024

Challenge for Credit

Event	Date
Challenge for credit application deadline	
For classes offered Summer Term 2024	April 26, 2024

Summer Dates applicable to Dentistry

Event	Date
IDDP Intersession	May 1 to June 23, 2024

Summer Dates applicable to Music

Event	Date
Summer Term Start and End Dates	2-week courses are offered in July and August (dates TBD)

Summer Dates applicable to Nursing

Event	Date
Summer Term Start and End Dates	Dates vary. see class schedule

Summer Dates applicable to Occupational Therapy

Event	Date
Year 1 Immediate Fieldwork	April 29 to June 21, 2024
Year 2 Advanced Fieldwork	June 24 to September 13, 2024 (Flexible start and end dates)

Summer Dates applicable to Pharmacy

Event	Date
Year 2 IPPE Hospital Rotation (1 block per student)	
Block 1	June 3 to 28, 2024
Block 2	July 2 to 26, 2024
Block 3	July 22 to August 16, 2024
Year 4	
Block 1 APPE Rotations	May 8 to June 30, 2023*
	May 6 to June 28, 2024**
Block 1 Research Project	May 8 to August 25, 2023*
	May 6 to August 23, 2024**
Block 2 APPE Rotations	July 4 to August 25, 2023*
	July 2 to August 23, 2024**
Block 2 Research Project	July 4 to October 20, 2023*
	July 2 to October 18, 2024**

* For Year 4 students graduating in May 2024.

** For Year 4 students graduating in May 2025.

Summer Dates applicable to Physician Assistant Studies

Event	Date
Academic Year	April 22 to July 12, 2024
Exams	July 15 to 19, 2024
Clinical Year	Ends August 16, 2024

Summer Dates applicable to Science

Event	Date
Summer Term Start and End Dates	May offer fieldtrip courses that have different dates

University Policies and Procedures

Accessibility Policy and Procedures

Accessibility Policy

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

Part I: Reason for Policy

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

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

Part II: Policy Content

Disability

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

General

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

2.4 The concept of reasonable accommodation requires a partnership between the individual requiring the accommodation and the University. All concerned should be responsible for respecting the dignity and confidentiality of the individual who requests the accommodation.

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

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

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

2.8 Confidentiality

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

Part III: Accountability

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

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

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

Part IV: Authority to Approve Procedures

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

Part V: Review

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

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

(a) the Approving Body deems it necessary or desirable to do so;

(b) the Policy is no longer legislatively or statutorily compliant; and/or

(c) the Policy is now in conflict with another Governing Document

Part VI: Effect on Previous Statements

6.1 This Policy is a new policy.

Part VII: Cross References

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

(a) Student Accessibility Procedure;

(b) Student Accessibility Appeal Procedure;

(c) Respectful Work and Learning Environment Policy;

(d) RWLE and Sexual Assault Procedure;

(e) The Accessibility for Manitobans Act;

(f) The Human Rights Code; and

(g) The Personal Health Information Act.

Student Accessibility Procedure

Part I: Reason for Procedure

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

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

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

(a) The accommodation is reasonable;

(b) The accommodation does not create an undue hardship for the University; and

(c) The accommodation does not compromise a defined Bona Fide Academic Requirement.

Part II: Procedural Content

Definitions

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

(a) **"Documented Disability”** means a disability requiring accommodation which has been accepted as such by Student Accessibility Services.

(b) **"Bona Fide Academic Requirement”** or "BFAR" describes the knowledge and skills that a Student must acquire and /or demonstrate in order to complete a course or program successfully. These are the essential and minimum requirements, including methods of assessment that the Student must meet. Unless otherwise specified by an academic program, BFARs may be modified. They cannot be waived or substituted.

(c) **“Reasonable Accommodation”** means an accommodation of the special needs of any Student, if those special needs are based upon a Documented Disability, that is reasonable but not necessarily perfect in the circumstances, that does not cause undue hardship to the University, and does not compromise a Bona Fide Academic Requirement of the University. The University is under no obligation to offer a Reasonable Accommodation (or any accommodation for that matter) on compassionate or other grounds.

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

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

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

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

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

(i) **"Faculty/School"** includes:

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

(i) all schools of the University

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

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

(i) Applicant- an individual who has submitted application for admission to the University;

(ii) Admitted- an individual who has accepted an offer of admission to the University;

(iii) Current- an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension.

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

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

(i) providing additional time and quiet space to write examinations;

(ii) alternate exam formats;

(iii) alternate modes of course delivery or evaluation;

(iv) provision of a note taker or interpreter;

(v) special equipment in classrooms; and

(vi) adaptive technology

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

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

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

Responsibilities and Rights of Students

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

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

(a) Name, contact information, student number; and

(b) Documentation from a registered health professional which should include:

(i) Name of the registered health professional;

(ii) Dates of the clinical assessments performed in determining the disability and the need for Reasonable Accommodations;

(iii) How the disability will affect the Student in the academic setting (i.e. on campus, in classroom, lab, clinical/fieldwork and other instructional settings, and during tests and exams);

(iv) An indication of the duration of the Student's period of disability; and

(v) Recommendations for appropriate accommodations to be made for that Student, with reference to any relevant health information that may support those recommendations.

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

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

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

(a) Letter of Accommodation (outlining individual needs for distribution to instructors); and

(b) Tests/Exams Particular Forms (to be completed for each test/ exam).

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

The Canada Student Grant

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

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

Responsibility and Rights of Student Accessibility Services [1]

2.11 Student Accessibility Services has the responsibility and right to:

(a) Offer advice, guidance and support for Students requiring academic accommodation and assign a SAS advisor to the Student.

(b) Request and evaluate documentation from registered health professionals provided by Students requesting assistance from SAS and assign appropriate services to meet the needs of each Student by adapting services, courses, and programs as feasible. SAS will consider the suggestions/recommendations noted in the documentation of a disability/condition but may not agree to all of the suggestions/recommendations.

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

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

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

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

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

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

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

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

(k) Keep current with associated legislation.

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

[1] Rights and Responsibilities section of policy adapted and used with permission from Mount Royal University, policy 517 Academic Accommodations for Students with Disabilities.

Responsibility and Rights of Academic Staff Members

2.12 Academic Staff Members have the right to:

(a) Determine course content and methods of instruction.

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

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

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

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

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

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

2.13 Academic Staff Members have the responsibility to:

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

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

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

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

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

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

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

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

Responsibilities and Rights of Faculties/Schools

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

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

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

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

Faculty/School Accessibility Advisory Committee

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

Membership of the Faculty/School AAC

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

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

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

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

Responsibilities the Faculty/School AAC

2.17 The AAC will be responsible for:

(a) Advising the Dean on all matters related to accommodations including the resolution of conflict; and

(b) Reviewing impact of Accommodations on academic standards.

2.18 The AAC role is to:

(a) Meet a minimum of two times per year;

(b) Recommend Faculty/School or College policies and processes;

(c) Receive reports from the SAS representative;

(d) Monitor trends internally, locally, and nationally regarding appropriate accommodations/approaches to accommodation;

(e) Support the Accommodation Team in working through the logistics of accommodations, including the acquisition of resources

(f) Generally monitor and ensure student awareness of procedures and processes

(g) provide an annual report to the Dean, Faculty Council and Vice-Provost(Students) (a copy of the report shall also be provided to the Coordinator of SAS).

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

(a) a process to keep Student identities anonymous, unless not feasible based on the requirements of the Student;

(b) a process to work with and support the Accommodation Team.

Faculty/College/School Accommodation Team

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

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

(a) one or more representatives from the Faculty/School or College who have expertise and responsibilities in the area of student academic progress;

(b) a Faculty/ School or College academic staff person who can offer insight into the essential requirements of a course/program or Bona Fide Academic Requirements; and

(c) the SAS staff member assigned to Faculty/School or College as member of the team.

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

Responsibilities the Faculty/College/School AT

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

(a) meet as required;

(b) review consider Non-Standard Accommodation recommendations made by Student Accessibility Services (SAS);

(c) upon request, help SAS facilitate the implementation of approved Non-Standard Accommodations;

(d) monitor individual student progress as needed;

(e) report to the Dean/Director if it appears that established processes and procedures are not understood or being followed by members of the Faculty/School or College;

(f) provide information, as appropriate and on a 'need-to know' basis, to the respective AAC and to other individuals as needed; and

(g) at least annually provide a report to the respective AAC of matters considered by the AT, outlining de-identified information regarding the number and types of issues considered, information regarding observable trends (if any), and de-identified information regarding particularly important cases.

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

Reconsideration Process

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

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

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

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

Part III: Accountability

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

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

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

Part IV: Review

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

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

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

(b) the relevant Policy is revised or rescinded.

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

(a) comply with these revised procedures; or

(b) are in turn repealed.

Part V: Effect on Previous Statements

5.1 This procedure supersedes the following:

(a) Accessibility for Students with Disabilities (January 26, 1995);

(b) all previous Board/Senate procedures, and resolutions on the subject matter contained herein; and

(c) all previous Administration procedures, and resolutions on the subject matter contained herein.

Part VI: Cross References

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

(a) Accessibility Policy

(b) Student Accessibility Appeal Procedure

(c) General Academic Regulations, Academic Calendar

Student Accessibility Appeal Procedure

Part I: Reason for Procedure

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

(a) students to appeal decisions relating to accommodation of a disability which adversely affect them; and

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

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

Part II: Procedural Content

Definitions

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

2.2 Students who believe that they have not been treated in accordance with the Student Accessibility Procedure, or who believe they were not reasonably accommodated by the proposed Accommodation, or who believe that the proposed Accommodation may have been different in light of new or previously unavailable information or documentation may first discuss this matter with the Coordinator of Student Accessibility Services (SAS) and request reconsideration. In seeking to resolve any disagreement, the Faculty/School Accessibility Advisory Committee may be consulted by a party.

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

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

Formal Appeal to Senate Committee on Academic Accommodation Appeals

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

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

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

(a) A completed and signed Senate Committee on Academic Accommodation Appeals – Appeal Form. The form is available at the Student Advocacy Office, The Office of the University Secretary, and on the University of Manitoba website;

(b) A letter to the Chair clearly explaining the grounds for the appeal;

(c) A copy of the letter of reconsideration from the Coordinator of SAS;

(d) A copy of all the documentation submitted in regard to the request for accommodation and reconsideration;

(e) If the Appellant intends to have a lawyer present at the appeal hearing, the name and address of the lawyer shall be provided at the time of filing the appeal.

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

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

(a) that his/her spokesperson is familiar with the Student Accessibility Appeal Procedure, the University of Manitoba Accessibility Policy and the Student Accessibility Procedure;

(b) the adequacy of his/her representation, if any; and

(c) to pay for his/her own lawyer's fees, if any.

2.10 Students may appeal a decision when:

Failure of Judgment

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

Failure of Process

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

Failure of Information

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

2.11 Academic Staff Members may appeal a decision when:

Compromising Academic Standards

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Part III: Accountability

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

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

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

Part IV: Review

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

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

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

(b) the Procedure is no longer legislatively or statutorily compliant;

(c) the Parent Policy is revised or repealed

Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

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

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

Part VI: Cross References

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

(a) Accessibility Policy

(b) Student Accessibility Procedure

(c) Senate Committee on Admission Appeals

(d) Senate Committee on Appeals

Authorized Withdrawal Policy and Procedure

Authorized Withdrawal Policy

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

Part I: Reason for Policy

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

Part II: Policy Content

Definitions

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

(a) "Authorized Withdrawal" or "AW" is an approved withdrawal from all courses in a given period for medical or compassionate reasons.

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

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

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

(e) "Leave of Absence" is a period of leave, established, administered, and approved by the Faculty/College/School that enables Students to temporarily withdraw from the University.

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

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

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

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

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

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

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

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

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

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

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

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

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

General

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

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

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

Scope

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

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

2.7 Withdrawal from future Terms may be subject to supplemental regulations adopted under section 2.4 of this Policy. Students considering withdrawing from the University for future terms should consult their Faculty/College/School of registration.

Part III: Accountability

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

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

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

Part IV: Authority to Approve Procedures

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

Part V: Review

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

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

(a) The Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;

(b) the Policy is no longer legislatively or statutorily compliant; and/or

(c) the Policy is now in conflict with another Governing Document.

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

(a) comply with the revised Policy; or

(b) are in turn repealed.

Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

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

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

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

Part VII: Cross References

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

(a) Authorized Withdrawal Procedure;

(b) Definitions of Academic Units Policy;

(c) Voluntary Withdrawal Policy.

Authorized Withdrawal Procedure

Part I: Reason for Procedure

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

Part II: Procedural Content

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

2.2 An AW may be approved under the following circumstances:

(a) Medical Grounds. When a serious event, including but not limited to illness, accident or injury affects a student's ability to attend classes and/or complete course requirements; and/or

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

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

Requests for Authorized Withdrawal

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

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

2.6 An AW request must include the following:

(a) Official request form: The Request for an Authorized Withdrawal Form is available through the Dean's Office of the student's Faculty/College/School of registration, or from Student Advocacy.

(b) Letter of Explanation written by the student and detailing how the circumstances or symptoms affected their ability to attend classes and/or complete course requirements;

(c) Supporting documentation including but not limited to:

(i) Letters or documents from objective, credible and verifiable health care professionals. Students are encouraged to consult the Guidelines for Health Care Professionals that are available through the Office of Student Advocacy;

(ii) A funeral program and/or obituary;

(iii) A police report or auto accident report; and/or

(iv) Travel receipts (e.g., airline, rail, bus).

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

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

Responsibilities of the Student

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

Responsibilities of the Faculties/Colleges/Schools

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

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

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

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

Official Records

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

Tuition Fee Refund

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

Appeal Process

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

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

Part III: Accountability

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

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

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

Part IV: Review

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

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

(a) the Provost and Vice-President (Academic), or Approving Body, deems it necessary or desirable to do so;

(b) the Procedure is no longer legislatively or statutorily compliant;

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

(d) the Parent Policy is revised or repealed.

Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

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

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

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

Part VI: Cross References

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

(a) Authorized Withdrawal Policy;

(b) Access and Privacy Policy and Procedure;

(c) Guidelines for Healthcare Professionals;

(d) Tuition Fee Appeal Form

Campus Alcohol Policy

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

Part I: Reason for Policy

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

Part II: Policy Statement

2.1 Alcohol abuse is a serious health problem and can lead to conduct that may endanger the safety of individuals and result in damage to

property both on and off the University of Manitoba Fort Garry and Bannatyne Campuses (the "Campuses"). This in turn may result in legal claims involving the University and others. The purpose of this policy is to explicitly establish the general means by which alcohol abuse on the Campuses can be reduced, and to the extent possible, eliminated.

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

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

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

2.2.3 Requiring that events and facilities at which alcohol is served on the Campuses (the "events and facilities") be managed effectively, and in accordance with the University's policy and procedures and MLCC rules and regulations; and This policy applies broadly, and covers all events and facilities on the Campuses.

Part III: Accountability

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

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

Part IV: Secondary Documents

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

Part V: Review

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

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

(a) the Approving Body deems necessary; or

(b) the relevant Bylaw, Regulations or Policy is revised or rescinded.

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

(a) comply with the revised Policy; or

(b) are in turn rescinded.

Part VI: Effect on Previous Statements

6.1 This Policy supersedes the following:

(a) all previous Board/Senate Policies, Procedures, and resolutions on the subject matter contained herein; and

(b) all previous Administration Policies, Procedures, and directives on the subject matter contained herein;

(c) Campus Alcohol Policy dated September 25, 2001

Part VII: Cross References

(a) Procedures: Campus Alcohol Policy

(b) Student Discipline Bylaw

(c) The Liquor Control Act (Manitoba)

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

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

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

Definitions

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

Procedures

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

Disclosure and Security of Student Academic Records

Relevant Governing Documents are available online at: http://umanitoba.ca/access_and_privacy/governance.html

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

Electronic Communication with Students

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

Part I: Reason for Policy

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

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

Part II: Policy Content

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

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

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

Provision of University of Manitoba Email Accounts

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

Appropriate Use of University Email

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

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

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

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

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

Access to University Email

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

Use of University Email for Instructional Purposes

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

Final Examinations and Final Grades Policy and Procedure

Final Examinations and Final Grades Policy

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

Part I: Reason for Policy

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

Use of Terms

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

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

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

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

(i) a medical condition; or

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

(iii) religious obligations.

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

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

[1] University of Western Ontario, Academic Handbook, Issued 2009 03.

Part II: Policy Content

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

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

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

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

Deferred and Supplemental Examinations Procedures

Part I: Reason for Procedure

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

Part II: Procedural Content

Deferred Examinations

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

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

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

(a) participation in an inter-university, provincial, inter-provincial, national or international scholastic or athletic event;

(b) religious obligations; or

(c) a medical condition.

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

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

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

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

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

2.8 When an application for a deferred examination is approved by the faculty, school, or academic unit, the head of the unit in which the course is offered, in consultation with the instructor concerned, shall schedule the deferred examination to take place normally within thirty (30) working days from the end of the examination series from which the examination was deferred, taking into account the following:

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

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

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

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

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

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

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

Supplemental Examinations

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

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

Final Examinations Procedures

Part I: Reason for Procedure

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

[1] University of Western Ontario, Academic Handbook, Issued 2009 03.

Part II: Procedural Content

Information Provided to Students

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

Examination General Regulations

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

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

Final Examinations

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

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

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

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

Regulations for Examinations Administered by the Registrar's Office

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

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

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

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

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

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

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

Regulations for Examinations Administered by Student Accessibility Services

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

Invigilation of Examination

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

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

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

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

Responsibilities of Invigilators and Students

2.14 Prior to an Examination

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

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

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

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

2.15 Conduct During Examination

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

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

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

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

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

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

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

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

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

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

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

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

(v) No student scheduled to write an examination in a centrally administered location who arrives late for the examination shall be permitted to write longer than the scheduled end-time

for that examination. For those examinations not centrally scheduled, flexibility may be allowed at the discretion of the unit administering the examinations, but all students in a given course with commonly examined sections should have equal opportunities to take advantage of whatever flexibility is afforded.

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

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

2.16 At the Close of the Examination

(a) The time of conclusion of the examination should be announced.

(b) Every candidate must turn in an examination script before leaving the room to the invigilator located at the exit of the room.

(c) A count must be made of the scripts by course number and balanced against the total for each course examination indicated on the nominal roll.

(d) No student may be permitted to re-enter an examination room until all examination scripts have been collected.

(e) The nominal roll must be returned to the Registrar's Office at the conclusion of the examination session. Examination scripts may be either received by the instructor(s) concerned or be delivered to the Registrar's Office.

Audio Visual Supports

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

(a) Audio visual supports may be used to display examination questions where arrangements have been made to display all questions simultaneously for the entire examination period; or

(b) In courses where time limited identification is a legitimate and specified part of the examination process, the use of overhead or slide projectors, or other audio visual supports for display purposes shall be permitted.

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

Unauthorized Materials in Examinations

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

Security

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

Posting Examination Answers

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

Student Access to Final Examinations

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

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

Final Grades Procedures

Part I: Reason for Procedure

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

(a) Final grades;

(b) Incomplete grades;

(c) Continuing grades;

(d) Appeal of final grades; and

(e) Grading systems.

Part II: Procedural Content

Final Grades

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

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

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

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

Incomplete Grades

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

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

2.7 Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the instructor shall calculate the temporary grade using a zero value for incomplete work. The grade code reported will consist of the appropriate letter grade following by a space followed by the letter "I".

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

(a) for courses terminated in April – August 1st

(b) for courses terminated in August – December 1st

(c) for courses terminated in December – April 1st

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

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

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

Continuing Grades

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

Appeal of Term Work

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

Appeal of Final Grades

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

(a) On a Fall Term course grade the deadline is fifteen (15) working days following the first day in January which the University is open.

(b) On a Winter Term course grade the deadline is fifteen (15) working days after Victoria Day.

(c) For Summer Session course grades the deadline is thirty (30) working days following the end of the examination period.

(d) For all other programs the deadline is twenty (20) working days following the end of the examination period.

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

2.15 Examination scripts are to be held by the teaching unit responsible for the course until six (6) months after the expiration of the appeal period. In individual cases where appeals have been initiated, the holding period will be extended accordingly.

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

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

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

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

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

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

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

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

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

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

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

Grading Systems

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

Grade Point Averages Policy

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

Part I: Reason for Policy

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

Part II: Policy Content

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

General

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

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

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

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

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

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

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

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

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

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

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

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

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

Part III: Accountability

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

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

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

Part IV: Authority to Approve Procedures

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

Part V: Review

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

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

(a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;

(b) the Policy is no longer legislatively or statutorily compliant; and/or

(c) the Policy is now in conflict with another Governing Document.

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

(a) comply with the revised Policy; or

(b) are in turn repealed.

Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

(a) Grade Point Averages Policy, effective May 1, 2006;

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

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

Part VII: Cross References

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

(a) Authorized Withdrawal Policy;

(b) Definitions of Academic Units Policy;

(c) Voluntary Withdrawal Policy;

(d) Repeated Course Policy.

Repeated Course Policy

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

Limited Access will not affect registration for the current Academic Year, which includes Fall, Winter, and Summer terms. See University Policy and Procedures – Repeat Course Policy – Section 2.5 (a) Limited Access.

Part I: Reason for Policy

1.1 The purpose of this Policy is to:

(a) Articulate, on an institutional level, the rules that are to be applied when a course is repeated or its equivalent taken; and

(b) Identify the implications of repeating courses at the University.

Part II: Policy Content

Definitions

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

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

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

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

(d) "Degree Grade Point Average" or "DGPA" refers to the calculated GPA of all courses accepted for credit by the University towards a designated degree.

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

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

(g) "Grade Point Average" or "GPA" is the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted.

(h) "Initial Registration Period" refers to the period of assigned registration times within the Calendar for new and returning Students.

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

(j) "Limited Access" is a registration rule that prevents Students who have previously enrolled in a course, including courses from which they VW, from registering prior to the Limited Access Registration Date.

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

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

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

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

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

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

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

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

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

General Policy

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

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

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

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

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

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

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

Part III: Accountability

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

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

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

Part IV: Authority to Approve Procedures

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

Part V: Review

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

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

(a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;

(b) the Policy is no longer legislatively or statutorily compliant; and/or

(c) the Policy is now in conflict with another Governing Document.

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

(a) comply with the revised Policy; or

(b) are in turn repealed.

Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

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

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

Part VII: Cross References

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

(a) College Council Bylaws

(b) Definitions of Academic Units Policy

(c) Faculty and School Council General Bylaw

(d) Grade Point Averages Policy

(e) Voluntary Withdrawal Policy

Respectful Work and Learning Environment and Sexual Assault Policy and Procedure

Responsibilities of Academic Staff with Regard to Students Policy and Procedure

Responsibilities of Academic Staff with Regard to Students Policy

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

Part I: Reason for Policy

1.1 The purpose of this Policy is to identify the responsibilities and the discharge of responsibilities of Academic Staff with regard to Students.

1.2 Some of the responsibilities and discharge of responsibilities with regard to Students will rest with the individual Academic Staff member, while others are collective responsibilities to be exercised at the Unit level.

1.3 This Policy and its related Procedures will identify and differentiate the responsibilities and discharge of responsibilities of Academic Staff at the individual and at the Unit level.

Part II: Policy Content

Definitions

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

(a) "Academic Administrator(s)" refers to the senior academic administrative positions having direct management authority over a Unit and the primary responsibility for the management functions of planning, directing, controlling and evaluating a large group of the University's resources within that Unit, including people, budgets and facilities. This category includes, without limitation, a dean, director, associate dean, assistant dean, chair or head of department, insofar as they perform managerial duties.

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

(c) "Policy" means this Responsibilities of Academic Staff with regard to Students Policy.

(d)"Procedure" means the Responsibilities of Academic Staff with regard to Students Procedure.

(e)"Student" or "Students" refer to any person or group of people registered as a student at the University of Manitoba.

(f)"Unit" refers to a department, centre, institute, college, faculty, school, or other academic division to which Academic Staff is assigned to teach Students.

(g)"University" refers to the University of Manitoba.

Individual Responsibilities of Academic Staff

2.2 The responsibilities of Academic Staff with regard to Students are primarily instructional and scholarly, and secondarily administrative. They may include:

(a) Undergraduate, graduate, and continuing education instruction;

(b) Scholarly attainment through personal study and research, including:

(i)study for purposes of academic self-improvement or course improvement; and

(ii) keeping abreast of new developments, and research that leads to a useful or original contribution toward the advancement of knowledge and understanding;

(c) Administrative work as required for instructional and scholarly activities including committee work at various levels (departmental, faculty, university) as it pertains directly or indirectly to Students.

2.3 In discharging their instructional responsibilities, Academic Staff shall act with academic integrity, scholarly competence and pedagogic effectiveness by providing Students with pertinent materials in a timely manner, by maintaining familiarity with current policies and responsibilities regarding privacy, copyright and human rights, and by adhering to regulations pertaining to instruction, reporting and evaluation at the University.

2.4 Academic Staff are to provide an effective learning environment and to endeavor to ensure fair and consistent treatment of Students by periodically reviewing and updating all course content and outlines.

Collective Responsibilities of Academic Staff

2.5 The collective responsibilities of the Academic Staff shall be exercised through the actions of the Unit's administrators and councils, including:

(a) Periodically reviewing all courses and programs, including course descriptions, to ensure that the material to be presented is current and appropriate and the academic calendar information is clear and accurate;

(b) Ensuring that the Unit's policies, regulations and procedures provide for fair and consistent treatment of Students;

(c) Ensuring the academic calendar reflects any Unit-specific policies that may affect the Student's academic progress;

(d) Making available on the University's website and providing for convenient student access to information on supplemental Unit-specific regulations, policies and procedures; and

(e) Providing the names of instructors assigned to teach particular courses and sections at the earliest possible opportunity.

Part III: Accountability

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

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

3.3 Academic Staff and Academic Administrators are responsible for complying with this Policy.

Part IV: Authority to Approve Procedures

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

Part V: Review

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

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

(a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;

(b) the Policy is no longer legislatively or statutorily compliant; and/or

(c) the Policy is now in conflict with another Governing Document.

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

(a) comply with the revised Policy; or

(b) are in turn repealed.

Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

(a) Responsibilities of Academic Staff with Regard to Students Policy, revised June 25, 1998;

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

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

Part VII: Cross References

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

(a) Responsibilities of Academic Staff with Regard to Students Procedure;

(b) Conflict of Interest Policy;

(c) Conflict of Interest between Evaluators and Students due to Close Personal Relationships Policy;

(d) Electronic Communication with Students Policy;

(e) Final Examination and Final Grades Policy;

(f) Grade Point Averages Policy;

(g) Intellectual Property Policy

(h) Multi-Sectioned Courses Policy;

(i) Respectful Work and Learning Environment Policy;

(j) Sexual Assault Policy;

(k) Responsible Conduct of Research Policy;

(l) Student Advocacy Office Policy;

(m) Student Discipline Bylaw;

(n) Student Academic Misconduct Procedure;

(o) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(p) Student Discipline Appeal Procedure;

(q) Teaching Evaluation Policy;

(r) The University of Manitoba Accessibility Policy;

(s) University Health Services Policy;

(t) Voluntary Withdrawal Policy.

Responsibilities of Academic Staff with Regard to Students Procedure

Part I: Reason for Policy

1.1 To set out Procedures secondary to the Policy entitled "Responsibilities of Academic Staff with Regard to Students".

Part II: Procedural Content

Definitions

2.1 These procedures are to be read in conjunction with the Responsibilities of Academic Staff with regard to Students policy, and all capitalized terms used herein shall have the meaning given to them in the Policy. In addition, the following definitions shall apply:

(a) "Academic Administrator(s)" refers to the senior academic administrative positions having direct management authority over a Unit and the primary responsibility for the management functions of planning, directing, controlling and evaluating a large group of the University's resources within that Unit, including people, budgets and facilities. This category includes, without limitation, a dean, director, associate dean, assistant dean, chair or head of department, insofar as they perform managerial duties.

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

(c) "Calendar" means the University of Manitoba's official Academic Calendar under which the course is taught.

(d) "Policy" means the Responsibilities of Academic Staff with regard to Students policy.

(e) "Procedure" means this Responsibilities of Academic Staff with regard to Students procedure.

(f) "Student" or "Students" refer to any person or group of people registered as a student at the University of Manitoba.

(g) "Unit" refers to a department, centre, institute, college, faculty, school, or other academic division to which Academic Staff is assigned to teach Students.

(h) "Working Days" will mean Monday through Friday excluding days in which the University is closed.

Individual Responsibilities of Academic Staff

2.2 Course Content

Academic Staff shall teach their courses with due alignment to Calendar descriptions.

2.3 Policies

Academic Staff will maintain familiarity with current University, faculty, school, college and/or department policies regarding plagiarism and cheating, examination impersonations, student access to final examination scripts, student discipline, grade appeals, copyright and intellectual property, and the University policy regarding the respectful work and learning environment, as posted on the University's "Governing Documents" website;

2.4 Regulations

Academic Staff will adhere to regulations pertaining to the format, content and conduct of courses and laboratories, including regulations pertaining to examinations, term work, grades, and related matters as outlined in University and Unit guidelines.

2.5 Course Outline

Academic Staff shall provide a course outline to every Student registered in their class and review its content within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time). The course outline will contain at minimum the following information:

(a) Name of Academic Staff;

(b) Office number, telephone number and email address;

(c) A list of the learning materials that the Student is required to obtain including the appropriate referencing style guide(s) acceptable to the Academic Staff and/or discipline in courses where it is relevant;

(d) A course description outlining the topics to be covered and goals of the course, which could include the bona fide academic requirements and learning outcomes for the course;

(e) Expectations for class attendance and penalties, if any, for non-compliance;

(f) A description of the evaluation procedure and methods that will be used, including:

(i)The weighting of the components that will contribute to the final grade;

(ii) A description of how the numeric grade will be converted to the University's letter grade system; and

(iii) An indication of whether specific assignment instructions, grading rules, or rubrics will be provided.
Note: It is understood by Senate that the provision of this information is not intended to affect the question of equity in multi-sectioned courses in any way.

(g) An indication of how evaluative feedback will be given to the student, including:

(i)The form of evaluative feedback [formative (e.g. comments) or summative (e.g. grade)];

(ii) When summative feedback will be distributed in relation to the voluntary withdrawal deadline, Unit guidelines, and section 2.9(f) of this Procedure; and

(iii) The method in which evaluative feedback will be delivered (for example, via paper or electronic method);

(h) A schedule of the Academic Staff member's availability for individual student consultation, in accordance with section 2.9(d);

(i) A schedule of term assignments and tests;

(j) A statement of the practice to be followed regarding late submission of assignments and missed term tests;

(k) A statement outlining parameters for the use of electronic and mechanical devices and course technology that may be required (for example, cellphones, laptops, tablets);

(l) A statement regarding recording of classes, with reference to any University policies that might apply;

(m) A statement referring Students with disabilities to Student Accessibility Services to facilitate the implementation of accommodations, and a statement communicating willingness to meet with Students to discuss the accommodations recommended by Student Accessibility Services; and

(n) A statement regarding academic integrity, including "plagiarism and cheating" and "examination personation" as described in the Calendar and, where appropriate, references to specific course requirements for individual work and group work, such as:

(i) Group projects are subject to the rules of academic dishonesty;

(ii) Group members must ensure that a group project adheres to the principles of academic integrity.

(iii) Students should also be made aware of any specific instructions concerning study groups and individual assignments;

(iv) The limits of collaboration on assignments should be defined as explicitly as possible; and

(v) All work is to be completed independently unless otherwise specified.

2.6 Policy and Resource Document

Academic Staff shall provide to every student the information on University support offices and policies outlined in Schedule "A" to this Procedure, within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time).

2.7 Learning Materials

Academic Staff shall specify learning materials in accordance with announced purchasing deadlines.

2.8 Changes to Course Outline and Timing Requirements

Academic Staff who wish to make changes to the method of evaluation or format of assignments in the course outline after it has been distributed to the class shall proceed as follows:

(a) Academic Staff shall, in a timely fashion:

(i) Discuss the proposed changes (e.g. in the class and/or through UM Learn) and encourage Students to provide feedback to the Academic Staff if there are any issues with the proposed changes;

(ii) Provide the revised outline to the Academic Administrator of the Unit; and

(iii) Confirm the changes in writing by providing the revised course outline to every Student registered in the course within the first week following the change, either through a paper copy and via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by University administration from time to time).

(b) In circumstances where weighting of assignments is changed retroactively, a Student who wishes to be graded according to the original course outline must advise the Academic Staff within at least five (5) Working Days of receiving the revised outline, failing which the Student will be graded according to the revised outline. Academic Staff shall advise Students of the deadline when they provide the revised outline.

2.9 Interactions with Students

In their interactions with Students, Academic Staff shall:

(a) not deny registration for instruction in those courses for which the permission of the Academic Staff is required, except where the Student lacks appropriate qualifications or where an approved policy on limited enrolment is in effect;

(b) comply with existing human rights legislation;

(c) not accept money or other goods or services from Students for assistance with any course offered by the University. This clause, however, shall not prevent student teaching assistants or other Academic Staff from accepting payment for tutoring in courses/sections which do not fall within the scope of their University employment;

(d) be available for a reasonable amount of time, on a known and posted basis, for individual consultation with Students registered in their courses or laboratories;

(e) evaluate student academic performance in a fair and reasonable manner, and by means of appropriate academic criteria;

(f) provide early evaluative feedback as specified in the course outline (see section 2.5(g));

(g) foster an exchange of ideas between themselves and their Students in the classroom and allow Students the freedom to take legitimate exception to the data, views, or methods presented;

(h) respect the confidentiality of information about Students;

(i) keep confidential any information about the academic performance of a Student, unless release is authorized by the Student, required by his/her instructional team, or requested by an administrative officer in accordance with the University policy on the release of information;

(j) explicitly acknowledge in written or oral presentations any contribution of student research or assistance;

(k) not obtain any improper personal advantage from a Student or Student work; and

(l) not retaliate against a student who has filed a complaint, whether the complaint was substantiated or unsubstantiated.

2.10 Instruction

Academic Staff are responsible for:

(a) the organization, preparation and delivery of course material, the evaluation of student academic progress;

(b) the reporting of such evaluation in accordance with approved policies and schedules; and

(c) consultation with Students out of class or laboratory hours, and supervision of student research and thesis preparation.

2.11 Scheduled Classes

Academic Staff shall not cancel, miss, terminate or shorten scheduled instruction except for good reasons. Whenever a scheduled period of instruction is cancelled, the Academic Staff shall:

(a) inform the class at the earliest possible time;

(b) inform the Academic Administrator of his/her Unit at the earliest possible time; and

(c) where possible, ensure that appropriate substitution or make-up instruction is provided.

2.12 Evaluation

Academic Staff shall adhere to the relevant Senate-approved policy regarding professor-course evaluation.

2.13 Reporting Student Grades
Academic Staff who provide instruction shall comply with the schedules and formats for reporting student grades, as established by their Unit and the Registrar's Office. Where such grades are reviewed by Unit committees, Academic Staff should be available for the duration of the committees' work. Academic Staff must also correct any grade errors of which they become aware in a timely manner and notify the Student accordingly.

2.14 Term Work
Academic Staff shall adhere to Unit-specific policies regarding return and/or retention of term work. In the absence of Unit-specific policies, all term work shall be returned to the Student. Any unclaimed term work will be held by the Unit for 4 months from the end of the term in which the work was assigned. At the conclusion of this time, all unclaimed term work will become property of the Unit and be destroyed according to the University's common records schedule, using confidential measures for disposal.

2.15 Class Size
Where necessitated by large class sizes or other circumstances, the Unit shall ensure that Academic Staff and/or designated substitutes are available for individual consultation with Students for a reasonable amount of time on a known and posted basis.

Collective Responsibilities of Academic Staff
2.16 Course Descriptions
Through their Unit councils, Academic Staff members should review program and course descriptions periodically to ensure that the material to be presented is current and appropriate and that the Calendar information is clear and accurate.

2.17 Materials
The following material must be kept on file in the Unit's general offices and made available to Students:

(a) University and Unit policy and procedures regarding class attendance and penalties, if any, for non-compliance;

(b) the information described in section 2.5 of this Procedure in regards to materials to be provided to Students by the Academic Staff of each course section;

(c) University and Unit policy and procedures regarding the evaluation of professors and courses by Students;

(d) University and Unit policy and procedures regarding student access to final examination scripts;

(e) University policy and procedures on student discipline;

(f) University and Unit policy and procedures regarding grade appeals;

(g) University policy and related procedures on the Responsibilities of Academic Staff with regard to Students;

(h) University policy and protocol regarding responding to sexual assault;

(i) University policy and related procedures on Respectful Work and Learning Environment;

(j) University policy and related procedures on Accessibility for Students with Disabilities; and

(k) University policy and related procedures on Intellectual Property.

2.18 Instruction
The Unit should ensure the provision of names of Academic Staff assigned to teach particular courses and sections at the earliest possible opportunity;

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

3.2 The Vice-Provost (Academic Affairs) is responsible for the implementation, administration and review of this Procedure.

3.3 Academic Staff and Academic Administrators are responsible for complying with this Procedure.

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

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

(a) the Provost and Vice-President (Academic) or Approving Body deems it necessary or desirable to do so;

(b) the Procedure is no longer legislatively or statutorily compliant;

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

(d) the Parent Policy is revised or repealed.

Part V: Effect on Previous Statements
5.1 This Procedure supersedes all of the following:

(a) Responsibilities of Academic Staff with regard to Students Policy, effective July 4, 1979 and revised June 25, 1998;

(b) Cancellation of Scheduled Classes Policy, effective November 30, 1971 and revised November 29, 1988;

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

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

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

(a) Responsibilities of Academic Staff with Regard to Students Policy;

(b) Schedule "A": Policy and Resource Document;

(c) Conflict of Interest Policy;

(d) Conflict of Interest between Evaluators and Students due to Close Personal Relationships Policy;

(e) Electronic Communication with Students Policy;

(f) Final Examination and Final Grades Policy;

(g) Grade Point Averages Policy;

(h) Intellectual Property Policy;

(i) Multi-Sectioned Courses Policy;

(j) Respectful Work and Learning Environment Policy;

(k) Sexual Assault Policy;

(l) Responsible Conduct of Research Policy;

(m) Student Advocacy Office Policy;

(n) Student Discipline Bylaw;

(o) Student Academic Misconduct Procedure;

(p) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(q) Student Discipline Appeal Procedure;

(r) Teaching Evaluation Policy;

(s) The University of Manitoba Accessibility Policy;

(t) University Health Services Policy;

(u) Voluntary Withdrawal Policy.

Schedule "A": Policies and Resources

1. In accordance with section 2.6 of the Responsibilities of Academic Staff with Regard to Students procedure, Academic Staff shall provide the following information to every student within the first week of classes, either through a paper copy and/or via the University's student information system (Aurora, UM Learn, or such other University information system as may be approved by the University from time to time):

(a) A list of academic supports available to Students, such as the Academic Learning Centre, Libraries and other supports as may be appropriate;

(b) A statement regarding mental health that includes referral information to resources and student supports, such as Student Counselling Centre, University Health Services and other supports as may be appropriate;

(c) A notice to respect copyright, with a reference directing Students to the University's Copyright Office;

(d) A statement directing the Student to University and Unit policies, procedures and supplemental regulations available online, with special direction to review the University's policies and procedures regarding:

(i) Academic Dishonesty: plagiarism, cheating and examination impersonation;

(ii) Student access to final examination scripts;

(iii) Student discipline;

(iv) Grade appeals;

(v) Student advocacy;

(vi) Respectful Work and Learning Environment;

(vii) Sexual Assault; and

(viii) Intellectual Property.

2. The University's Centre for Advancement Teaching and Learning will compile sample language and templates for Academic Staff to use in fulfilling the above requirements.

Student Discipline Bylaw and Procedure

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

Students are expected to conduct themselves responsibly with due regard for the rights of others and to maintain a high level of personal and academic integrity. Students who transgress these standards, whether expressed in policy or implied in generally accepted codes of conduct, can expect disciplinary action. Penalties arising from disciplinary actions may include fines, withholding of student privileges, suspension or expulsion from programs, or some other action specific to the situation. Penalties may also affect student eligibility to continue in their programs or to graduate.

Student Discipline Bylaw

Part I: Reason for Bylaw

1.1 The reason for this Bylaw is to outline the Disciplinary Actions available to Disciplinary Authorities and the subsequent appeal process available to Students for findings of Academic Misconduct and Non-Academic Misconduct.

Part II: Policy Content

Definitions

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

(a) "Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Academic Misconduct Procedure.

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

(c) "Appeal Procedure" means the Student Discipline – Appeal Procedure.

(d) "Bylaw" means the Student Discipline Bylaw.

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

(f) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3: Disciplinary Actions and Disciplinary Authorities.

(g) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline under:

(i) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct; or

(ii) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct.

(h) "Expulsion" has the same meaning as defined under section 2.16 of this Bylaw.

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

(j) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(k) "Reprimand" has the same meaning as defined under section 2.6 of this Bylaw.

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

(m) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving Suspension due to academic or discipline;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

(n) "Suspension" has the same meaning as defined in section 2.8 of this Bylaw.

(o) Table 1" refers to Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct, which follows the Bylaw.

(p) "Table 2" refers to Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct, which follows the Bylaw.

(q) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

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

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

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

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

(v) "UDC" means the University Discipline Committee composed under section 2.53 of the Appeal Procedure.

Disciplinary Actions

2.2 Students will be subject to Disciplinary Action under this Bylaw for acts of Academic Misconduct and for acts of Non-Academic Misconduct.

2.3 The Disciplinary Actions available to a Disciplinary Authority are set out in Table 3.

2.4 Once a Disciplinary Action has been implemented, no further Disciplinary Action may be imposed for the same matter except as a result of an appeal by the Student.

Student Academic History/Transcript with regard to Disciplinary Actions

2.5 Disciplinary Actions implemented shall not ordinarily be recorded on the Student's academic history / transcript except in the following:

(a) if the Student receives Suspension or Expulsion under sections 16, 17, 20 or 26 of Table 3; or

(b) a Reprimand has been ordered recorded on a Student's academic history / transcript under section 2 of Table 3.

Reprimand

2.6 "Reprimand" means an action intended to convey stern disapproval to a Student by means of recording their Academic Misconduct or Non-Academic Misconduct on their Student's academic history / transcript for a period of up to five (5) years.

2.7 Where a Reprimand has been ordered to be recorded on the Student's academic history / transcript (see section 2 of Table 3), the Reprimand shall be removed:

(a) Following the elapse of the specified period of time, upon the written request of the Student to the Registrar; or

(b) Earlier, upon a written order from the Disciplinary Authority that implemented the Disciplinary Action.

Suspensions

2.8 "Suspension" means any withdrawal of one or more rights or privileges for a definite or indefinite period of time.

2.9 A Student may receive Suspension from the following:

(a) a particular course or courses;

(b) a department;

(c) a Faculty/College/School;

(d) the University; or

(e) a Residence.

2.10 Students who have been suspended for a definite period of time shall, upon the lifting of the Suspension, have the rights or privileges that were suspended automatically reinstated, subject to any conditions attached to the Disciplinary Action proscribing future conduct.

2.11 Suspension for an indefinite period of time shall be dealt with as follows:

(a) In the case of Suspension for an indefinite time by the Executive Director of Enrolment Services, the Suspension may be lifted by the Executive Director of Enrolment Services upon consideration at the written request of the Student, after consultation with the Unit Head(s) of the Unit(s) concerned.

(b) In the case of Suspension for an indefinite period of time by a Disciplinary Authority other than the Executive Director of Enrolment Services, the Student may apply to the Disciplinary Authority that imposed the final penalty for a lifting of the Suspension. If the Suspension is lifted, the Student will have the rights or privileges that were suspended automatically reinstated, subject to any conditions attached to the Disciplinary Action proscribing future conduct.

2.12 Where a Student has received a Suspension pursuant to sections 2.9(c) or 2.9(d) of this Bylaw, any academic credits earned by the Student at the University or at any academic institution during the period of Suspension shall not be counted as credit toward any degree or program offered by the University, unless at the time of the imposition of the Suspension, the Disciplinary Authority stipulates otherwise.

2.13 Where the Student has received Suspension from a Faculty/College/School of the University, any other Faculty/College/School may refuse to register the Student for any course or courses or refuse to accept the Student into their programs, provided that prior to such refusal, the other Faculty/College/School has:

(a) obtained and considered a written report from the Disciplinary Authority that implemented the Suspension, outlining the circumstances surrounding the Disciplinary Action;

(b) provided the Student a copy of the report; and

(c) given the Student an opportunity to respond to the report.

2.14 A Suspension will appear on the Student's academic history / transcript until such time as the Suspension period has elapsed, when it shall be removed upon the written request of the Student to the Registrar.

2.15 In the case of Suspension for supplying false or misleading information in connection with an application for admission (see sections 23 and 24 of Table 3), any notation on the Student's academic history / transcript may only be removed:

(a) For undergraduate students, by the Registrar upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.

(b) For graduate students, by the Registrar in consultation with the Dean, Faculty of Graduate Studies, upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.

Expulsions

2.16 "Expulsion" means a withdrawal of all rights or privileges available to Students for either a definite or indefinite period of time.

2.17 A Student may receive Expulsion from the following:

(a) a Faculty/College/School;

(b) the University; or

(c) a Residence.

2.18 In the case of an Expulsion for a definite period of time, upon expiration of such time, in order to be readmitted, the Student must reapply for admission through normal channels to the appropriate authority having jurisdiction over admission.

2.19 In the case of an Expulsion for an indefinite period of time the Student may apply to the Disciplinary Authority that imposed the final penalty for a lifting of the Expulsion. If the Expulsion is lifted, the Student, in order to be readmitted, must reapply for admission through normal channels to the authority having jurisdiction over admission.

2.20 Where a Student has received an Expulsion pursuant to sections 2.17(a) or 2.17(b) of this Bylaw, any academic credits earned by the Student at the University or at any academic institution during the period of Expulsion shall not be counted as credit toward any degree or program offered by the University, unless at the time of the imposition of the Expulsion, the Disciplinary Authority stipulates otherwise.

2.21 Where the Student has received Expulsion from a Faculty/College/School of the University, any other Faculty/College/School may refuse to register the Student for any course or courses or refuse to accept the Student into their programs, provided that prior to such refusal, the other Faculty/College/School has:

(a) obtained and considered a written report from the Disciplinary Authority that implemented the Expulsion, outlining the circumstances surrounding the Disciplinary Action;

(b) provided the Student a copy of the report; and

(c) given the Student an opportunity to respond to the report.

2.22 An Expulsion shall appear on the Student's academic history / transcript and may only be removed by the Registrar upon the written order of the Disciplinary Authority that implemented the Disciplinary Action.

Appeals

2.23 Students have a right to appeal decisions made by a Disciplinary Authority, excluding the following decisions which are final:

(a) Any decision of the UDC.

(b) The discretionary decision of a Disciplinary Authority to lift a suspension or an expulsion under section 2.11 or section 2.19 of this Bylaw;

(c) The decision of a Faculty/College/School to refuse a Student under section 2.21;

(d) Any finding of fact under the Respectful Work and Learning Environment Policy or the Sexual Violence Policy.

2.24 Appeals shall be conducted in accordance with the Appeal Procedure.

2.25 Subject to section 2.26 of this Bylaw, no Disciplinary Action shall be implemented and Students shall be permitted to continue in their courses or program until the time for appeal has elapsed or until the Student has waived in writing the right to appeal, whichever occurs first. The Disciplinary Authority must ensure that the Student's work continues to be graded normally and is unaffected until the appeal period has lapsed or the appeal process is complete.

2.26 Section 2.25 of this Bylaw does not apply in the following circumstances:

(a) Where the Disciplinary Action would be entered on the academic history / transcript of the Student, the Registrar shall be notified by the Disciplinary Authority implementing such Disciplinary Action, and shall not issue any academic transcripts until the appeal period has elapsed or the appeal process is complete;

(b) Where the Disciplinary Action relating to academic dishonesty or academic fraud may result in a change to the Student's transcript, the Registrar shall be notified by the Disciplinary Authority implementing such Disciplinary Action, and shall not issue any transcripts until the appeal period has elapsed or the appeal process is complete;

(c) Where changes in the Student's courses and/or program are directly related to the matter under disciplinary consideration, such changes shall not be permitted;

(d) Where if the Disciplinary Action were not implemented, the safety of members of the University Community would be compromised.

Confidentiality

2.27 All matters relating to student discipline or appeal must be kept confidential in accordance with applicable University policies and procedures, and The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

Annual Reports

2.28 The Annual Report of the UDC will contain all the disciplinary matters that have occurred on campus from September 1 to the following August 31 of each Calendar year.

2.29 Academic Staff and department heads who have dealt with a disciplinary matter shall report to the Dean/Director of the Faculty/College/School to which each Student belongs, setting out the nature of the offence and particulars of the penalty and the Student's identification number if applicable. The Student's identification number is only used for administrative purposes to reduce the possibilities of errors in duplicate reporting and will not be included in the Annual Report.

2.30 Disciplinary Authorities, except members of the Academic Staff and department heads, shall report all disciplinary matters considered by or reported to them to the Chair of the UDC by October 1 of each year. The report shall contain the number of disciplinary matters referred to such person or body, the nature of the offences and particulars of the dispositions, and such further matters as may be required by the UDC.

2.31 The recording secretary of the UDC shall prepare and the Chair shall submit a report to the University President by December 1 in each year setting out both a summary of the reports submitted to the Chair of the UDC as well as particulars of the number, nature and disposition of cases appealed to the UDC.

2.32 Members of the University Community, shall be kept informed of the nature and disposition of cases dealt with under this Bylaw as the Annual Report shall be presented to the both the Senate and the Board of Governors annually. The names of Students disciplined shall not normally be made public.

Part III: Accountability

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

3.2 The President is responsible for the implementation, administration and review of this Policy.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Policy.

Part IV: Secondary Documents

4.1 The President or Approving Body may approve Regulations, Policies and Procedures which are secondary to and comply with this Bylaw.

Part V: Review

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

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

(a) The President or Approving Body deems it necessary or desirable to do so;

(b) The Bylaw is no longer legislatively or statutorily compliant; and/or

(c) The Bylaw is now in conflict with another Governing Document.

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

(a) comply with the revised Bylaw; or

(b) are, in turn, rescinded.

Part VI: Effect on Previous Statements

6.1 This Bylaw supersedes:

(a) Student Discipline Bylaw, dated January 1, 2009;

(b) all previous Board/Senate Bylaws, Regulations, Rules, Policies and Procedures, and resolutions on the subject matter contained herein; and

(c) the previous Faculty/College/School Council Bylaw, Regulations, Procedures, and resolutions on the subject matter contained herein.

Part VII Cross References

7.1 Cross referenced to:

(a) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;

(b) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;

(c) Table 3: Disciplinary Actions and Disciplinary Authorities;

(d) Student Discipline – Appeal Procedure;

(e) Student Academic Misconduct Procedure;

(f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(g) Definitions of Academic Units Policy;

(h) Final Examinations and Final Grades Policy and Procedures;

(i) Respectful Work and Learning Environment Policy;

(j) Sexual Assault Violence Policy;

(k) Disclosures and Complaints Procedure;

(l) Use of Computer Facilities Policy and Procedure;

(m) Violent or Threatening Behaviour Policy and Procedure;

(n) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175;

(o) The Personal Health Information Act, C.C.S.M. c. P33.5

Student Discipline Appeal Procedures

Part I: Reason for Procedures

1.1 These Appeal Procedures are secondary to the Student Discipline Bylaw and are intended to establish a process for appeals to be heard, and to provide guidance to the members of appeal panels, to the student and to the Faculty/College/School representatives in relation to appeal hearings.

Part II: Procedures

Definitions

2.1 The following terms are defined for the purpose of this Bylaw and related Procedures:

(a) "Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Academic Misconduct Procedure.

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

(c) "Appeal Body" means the appropriate persons or bodies as identified in sections 2.9 to 2.14.

(d) "Appeal Procedure" means this Student Discipline – Appeal Procedure.

(e) "Appellant" means the Student appealing a Disciplinary Action taken against him or her.

(f) "Bylaw" means the Student Discipline Bylaw.

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

(h) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3 of this Bylaw.

(i) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Academic Misconduct or Non-Academic Misconduct.

(j) "Discrimination" has the same meaning as defined under the Respectful Work and Learning Environment Policy.

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

(l) "Local Disciplinary Committee" or "LDC" means the standing or, from time to time, ad hoc committee appointed to hear and determine disciplinary matters under section 2.24 of this Appeal Procedure.

(m) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(n) "Notice of Appeal" means the appeal documentation that must be filed by the Student under section 2.16.

(o) "Respondent" means the Disciplinary Authority whose decision is being appealed.

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

(q) "Sexual Assault" has the same meaning as defined under the Sexual Assault Policy.

(r) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension due to academic or discipline;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

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

(t) "Table 3" means Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(u) "Unit" means a Faculty, School, College, institute, centre, academic support unit (for example, libraries) or administrative

unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a faculty or school is not a Unit as the term is used within this Procedure.

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

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

(x) "University Community" means all Board of Governors members, Senate members, Faculty/College/School Councils, employees, Students, volunteers, external parties, contractors and suppliers.

(y) "UDC" means the University Discipline Committee composed under section 2.53 of this Appeal Procedure.

Appeals Generally

2.2 Students have a right to appeal Disciplinary Actions made by a Disciplinary Authority, subject to section 2.23 of the Bylaw.

2.3 Only the Student who has been the subject of a Disciplinary Action has the right to appeal.

2.4 An Appeal Body may dispose of the matter by instituting any Disciplinary Action authorized to it under Table 3. The resulting disposition may be the same, more severe or less severe than the original Disciplinary Action and the Appellant must be so informed of this possibility prior to the commencement of an appeal hearing.

2.5 When an appeal is heard by an Appeal Body, the Appellant must be invited to attend the hearing and, if in attendance, be permitted to ask questions and offer an explanation. Every reasonable attempt should be made to schedule the hearing at a time and place that permits the Appellant's participation.

2.6 If the Appellant, Respondent or their respective representatives are unable to attend the hearing in person, the use of a digital communication, such as audio or video conferencing, may be used with prior consent of the chair of the Appeal Body, provided that such means enable all parties to clearly communicate. A request for such a meeting must be made at least one week in advance of the hearing date.

2.7 Subject to sections 2.40 and 2.74 of this Appeal Procedure, the Appellant may appear in person and be represented by a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, or a member of the Appellant's immediate family. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.8 Subject to sections 2.40, 2.45, 2.76, and 2.83 of this Appeal Procedure, a representative designated in writing by the Appellant may:

(a) attend any disciplinary hearing; and

(b) participate in any disciplinary hearing to the extent of asking questions of anyone in attendance and making submissions to any Appeal Body.

Appeal Routes

2.9 If the Appellant wishes to appeal the Disciplinary Action of a member of the Academic Staff (except for suspension from attendance for the balance of the meeting of one class), or the decision of a department head, the Notice of Appeal must be delivered to the appropriate Unit Head in the Unit offering course(s) and the Unit Head in the Unit in which the Appellant is registered, with a copy to the Academic Staff or department head, as the case may be.

2.10 If an Appellant is appealing within a Unit that does not have department heads, then the first level of decision will be the Unit Head of that respective Unit and the next level of appeal will be as set out in section 2.11 of this Procedure.

2.11 If the Appellant wishes to appeal the Disciplinary Action of a Unit Head, or the Director of Student Residences, the Notice of Appeal must be delivered to the appropriate Local Disciplinary Committee in care of the respective Unit Head or Director of Student Residence.

2.12 If the Appellant wishes to appeal the Disciplinary Action of the University Librarian (other than as a delegate of the President), a delegate of the University Librarian, or an ad hoc committee appointed by the University Librarian, the Notice of Appeal must be delivered to the Chair of the Senate Committee on Libraries, with a copy to the person or ad hoc committee which made the initial disciplinary decision. Within ten (10) working days of receipt of the Notice of Appeal, the Chair of the Senate Committee on Libraries will appoint a Library Appeals Committee to hear the appeal.

2.13 If the Appellant wishes to appeal the disciplinary decision of any of the following Disciplinary Authorities or appeal any Disciplinary Action related to Sexual Violence or Discrimination, the Notice of Appeal must be delivered to the UDC in care of the Secretary of the UDC (University Secretary):

(a) the decision of an LDC or the Library Appeals Committee;

(b) the decision of the Executive Director of Enrolment Services;

(c) the decision of the Dean of the Faculty of Graduate Studies in relation to fraudulent documents submitted for admission to the Faculty;

(d) the decision of the Executive Director of Enrolment Services or the Associate Vice-President (Administration) or an ad hoc committee appointed by either of these persons;

(e) the decision of the Chief Information Officer of Information Services and Technology (IST);

(f) the decision of the Registrar;

(g) the decision of the Vice-President (Administration);

(h) the decision of the Vice-Provost (Students); or

(i) the decision of the President or delegate.

2.14 If the disciplinary matter involved two or more Students and two or more Students appeal:

(a) The Students must have separate hearings, but the members of the Appeal Body may be the same for each hearing, subject to sections 2.33 and 2.67 of this Procedure;

(b) The Respondents may bring in relevant information on the other Student(s) as it pertains to each appeal; and

(c) Every effort must be made to protect the identity of the other Student(s).

Filing an Appeal

2.15 The Appellant must deliver the Notice of Appeal to the appropriate Appeal Body within ten (10) working days as of the date on the letter notifying the Appellant of the Disciplinary Action from the lower body.

2.16 The Notice of Appeal must include:

(a) such appeal application form, with current mailing address and telephone numbers, as may be required by the Appeal Body;

(b) copies of such written materials as the Appellant wishes considered in connection with the appeal;

(c) copies of the letter indicating the lower level decision, if not a first level appeal;

(d) A letter clearly outlining the reason for the appeal and the remedy sought, including an indication of whether the Appellant is appealing the decision on:

(i) the finding of facts; where permitted subject to s. 2.23 of the Student Discipline Bylaw;

(ii) the Disciplinary Action imposed by the Disciplinary Authority; or

(iii) both the facts and the Disciplinary Action, where permitted subject to s. 2.23 of the Student Discipline Bylaw; and

(e) the name and contact information of any representative that the Appellant wishes to have present at the appeal hearing, subject to subject to sections 2.7, 2.39 and 2.74 of this Appeal Procedure.

(f) In the case of an appeal to the LDC or UDC, a listing of all resources or witnesses the Appellant wants in attendance at the hearing and their relevance. The scheduling of witnesses and resource people is the responsibility of the Appellant.

2.17 Subject to section 2.18, if an appeal is not received by the next level Appeal Body by the deadline set out in section 2.15, the Disciplinary Action against the Student will be implemented.

2.18 The time for delivery of a Notice of Appeal may be extended by the Appeal Body, or by the chair of the Appeal Body where the Appeal Body is the LDC or the UDC.

2.19 The Disciplinary Action implemented may be put on hold if the Appeal Body receiving the next level of appeal deems the lateness acceptable and grants the Appellant permission to proceed with the appeal after deadline.

2.20 The Appellant and the designated representative of the Appellant must receive the same notices of hearings held by the LDC and the UDC as the Respondents.

Responsibilities of Respondents

2.21 The Respondent will be given ten (10) working days to respond to the Notice of Appeal.

2.22 Respondents must submit the following:

(a) A written response to the Appellant's Notice of Appeal;

(b) All relevant documentation the Respondents will rely on as support for their position regarding the appeal; and

(c) In the case of an appeal to the LDC or UDC, a listing of all resource people or witnesses they want in attendance at the hearing and their relevance. The scheduling of witnesses and resource people is the responsibility of the Respondent.

(d) All the above documents must be filed within the time set out in section 2.21. If the Respondent had not received permission for an extension, a written request must be submitted to the Appeal Body to determine whether the Respondent's submission will be accepted.

2.23 If no response is received from the Respondent by the date requested by the office coordinating the appeal, a hearing may be set.

Local Discipline Committee (LDC)

LDC Jurisdiction

2.24 Each Faculty/College/School, and the University Student Residences under the jurisdiction of the Office of Student Residences, must establish a standing or, from time to time, ad hoc committee to hear and determine disciplinary matters appealed to it by Students from a decision of the Dean/Director of that Faculty/College/School, or the Director of Student Residences for the University Residences under the Office of Student Residences' jurisdiction.

2.25 The LDC and the hearing panels thereof must exercise disciplinary authority on all Students that are appealing a decision from the Dean or Director of the Faculty/College/School or University Student Residence.

2.26 The Disciplinary Actions available to the LDC are set out in Table 3.

LDC Composition

2.27 In Faculties/Colleges/Schools, the LDC must be composed of an equal number of faculty members and students with a minimum of eight (8) members.

2.28 In the case of University Student Residences, the LDC must be composed of an equal number of residence staff and students with a minimum of eight (8) members. Members must be appointed by the Director of Student Residences with the advice of the appropriate Residence Students' Association.

2.29 The chair of the LDC must be elected by and from the membership of the LDC.

2.30 A quorum must be half the members, with a minimum of four (4) members, ensuring at least one (1) student and one (1) faculty member are present.

2.31 Where the Disciplinary Action relates to two (2) or more Faculties, Colleges or Schools, the LDC hearing panel must contain at least one (1) student and one (1) faculty member from each Faculty/College/School.

2.32 The chair must only vote in the case of a tie.

2.33 The Appellant, or the Appellant's representative, if any, and Respondent must have the right to challenge for cause any member of the LDC, the validity of the challenge to be judged by the remainder of the LDC. Such cause may include current teacher-student relationship, bias, or any factor likely to prejudice a fair hearing. Any person, who was directly involved in the original Disciplinary Action, either as a principal in the case or as a Disciplinary Authority, must be automatically removed from any hearing panel regarding the appeal.

LDC Hearing Procedures

2.34 The Appellant must be presumed innocent until the evidence presented indicates that, on the balance of probabilities Disciplinary Action is warranted. The LDC, in weighing the balance of probabilities, must consider the severity of the alleged incident.

2.35 The hearing must be by way of a trial de novo unless the appeal has been made only in relation to the severity of the Disciplinary Action imposed.

2.36 Hearings must be closed unless the Appellant requests in writing at least forty-eight (48) hours before the hearing that a hearing be open and there is no reasonable objection to an open hearing.

2.37 If the appeal hearing is in closed session, no observers may be present in the room. If the appeal hearing is in open session, any observers present will not be allowed to contribute in any way to the proceedings. Regardless of open or closed status, no electronic or other recording devices will be permitted.

2.38 Regardless of section 2.36, hearings related to discipline under the Respectful Work and Learning Environment Policy and/or discipline under the Sexual Violence Policy must be closed.

Representatives at LDC Hearing

2.39 At the LDC hearing, the Appellant may appear in person and be represented by a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, or a member of the Student's immediate family. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.40 If the Appellant or the Respondent wishes to have a lawyer present, the lawyer(s) present may only be a non-participating observer(s) at hearings of the LDC, but may represent the Appellant or Respondent at hearings of the UDC.

Failure to Attend LDC Hearing

2.41 An Appellant who fails to attend a scheduled appeal hearing may have the appeal considered on the basis of the Appellant's written submission, the presentation of the Appellant's designated representative, if any, and the verbal and written submissions made by the Respondent.

2.42 The Appellant shall be advised that the LDC has made a decision regarding the appeal and that the Appellant has ten (10) days to provide reasons for missing the hearing prior to the implementation of the decision. The LDC Chair will determine whether the hearing should be re-scheduled based on any submission from the Appellant. A reasonable attempt will be made to reconvene the same members should the hearing be re-scheduled.

Evidence at LDC Hearing

2.43 The Appellant and the Appellant's designated representative, if any, and the Respondent or the Respondent's representative, will receive in writing, at least five (5) working days before the date set for the hearing, the names of the members of the LDC hearing panel who will hear the appeal and the information that has been submitted to the LDC hearing panel by both relevant parties, in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

2.44 The Appellant, or the Appellant's designated representative, if any, and the Respondent, or the Respondent's representative, if any, may call witnesses and submit other evidence. The Appellant, the Appellant's representative, if any, and the Respondent, or Respondent's representative, if any, are responsible for arranging their own witnesses. If witnesses are to be called, a witness list must be provided by the Appellant or the Appellant's representative, if any, in their original appeal package provided to the Chair and a witness list must be provided by the Respondent or the Respondent's representative, if any, with their response to the appeal.

2.45 The Appellant must not be required to testify, but if the Appellant elects to do so, then the Appellant may be cross-examined by the Respondent, or the Respondent's representative, if any.

2.46 The Appellant or the Appellant's designated representative, if any, and the Respondent, must have the right to cross-examine witnesses.

2.47 The LDC may consider confidential information from the University Health Service, Counselling Service, University Chaplains and other similar services which are submitted by these services to the LDC at the request of the Appellant. Such confidential information submitted to the LDC may only be used for the purpose of the appeal.

Adjournments of LDC Hearing

2.48 Requests for adjournment must be granted within reason.

Disposition of LDC Hearing

2.49 A decision to uphold or deny an appeal, in whole or in part, and a decision to take different Disciplinary Action, in whole or in part, requires a simple majority of LDC Committee members present and voting. The results of the hearing must be conveyed in writing, in a timely fashion, by the Chair of the LDC to the Appellant or the Appellant's designated representative, if any and to the Respondent or the Respondent's designated representative, as the case may be.

2.50 If, after hearing all the evidence, the LDC is satisfied on the evidence presented that the Appellant has committed Academic Misconduct or Non-Academic Misconduct, the LDC may dispose of the matter by instituting any Disciplinary Action set out in the column entitled "Deans, Directors or LDC" in Table 3.

University Discipline Committee (UDC)

UDC Terms of Reference

2.51 The UDC must:

(a) Report annually to the President.

(b) Establish procedures, consistent with this Bylaw, for hearing panels.

(c) Hear appeals, either as a committee of the whole or through a hearing panel, from decisions of Disciplinary Authorities.

(d) Review the Bylaw and related procedures periodically and, if necessary, to recommend changes to them.

UDC Jurisdiction

2.52 The UDC and the hearing panels thereof shall exercise Disciplinary Authority on behalf of the Board of Governors on all Students that are appealing a decision from the Disciplinary Authorities that are set out in section 2.13 of this document.

UDC Composition

2.53 The UDC shall be composed of nineteen (19) members. The nineteen (19) shall include:

(a) eight (8) faculty members nominated by the Senate Nominating Committee and appointed by the Board of Governors;

(b) seven (7) students nominated by the Student Senate Caucus and appointed by the Board of Governors;

(c) the President of the University of Manitoba (or designate), as an ex-officio member;

(d) the President of the University of Manitoba Students' Union (or designate), as an ex-officio member;

(e) the President of the University of Manitoba Graduate Students' Association (or designate), as an ex officio member; and

(f) the Chair appointed pursuant to section 2.57. The Chair must only vote in the event of a tie.

2.54 Positions for which no nomination had been received from the Student Senate Caucus by September 15th shall be nominated by the Senate Nominating Committee.

2.55 The terms of office shall be three (3) years for academic staff, and one (1) year for students, from June 1 to May 31(academic staff), and October 14 to October 13 (students). A member whose term of office has expired in any year shall continue in office until a successor has been appointed and shall be eligible for reappointment.

2.56 A quorum must be nine (9) the members, where a minimum of one (1) student and one (1) academic are present.

2.57 A Chair will be appointed by the Board of Governors for a three (3) year term.

2.58 The Vice-Chair shall be elected from and by the members of the UDC for a three (3) year term.

UDC Hearing Panels

2.59 When a matter has been appealed to the UDC, the Chair must either convene the UDC or convene a hearing panel thereof to hear the appeal.

2.60 A quorum shall be a minimum of four (4) members, ensuring at least one (1) student and one (1) faculty member are present including the Chair.

2.61 The Chair may vote only if there is a tie.

2.62 UDC members who have a conflict of interest in a particular case, or have a temporary work conflict, or are otherwise unable to sit, may disqualify themselves from hearing an appeal.

2.63 Notwithstanding the foregoing, the Chair of the UDC may, in a particular case, require that a larger hearing panel be convened to consider the matter, provided that such a larger hearing panel maintains the proportional representation as set out in section 2.60.

2.64 The Chair of the UDC may use his/her discretion to reject an appeal if the appeal appears to be clearly outside the jurisdiction of the UDC, (for example, matters not dealing with discipline nor related Disciplinary Actions taken by a lower Appeal Body).

2.65 When an appeal is received based on a fine or the amount ordered, the only decision from which an appeal is taken is the amount levied by way of fine or the amount ordered to be paid by way of restitution; then, if such fine or restitution does not exceed $500.00, the Chair may, at the Chair's discretion, personally decide the matter, or may convene a hearing panel to hear the appeal.

2.66 A staff member from the Office of the University Secretary, will serve as recording secretary for the hearings.

2.67 The Appellant, or the Appellant's representative, if any, and the Respondent must have the right to challenge for cause any member of the UDC hearing panel, the validity of the challenge to be judged by the remainder of the UDC hearing panel if such a challenge is made at this time. Such cause may include current teacher-student relationship, bias, or any other factor likely to prejudice a fair hearing. Any person who was directly involved in the original Disciplinary Action, either as a principal in the case or as a Disciplinary Authority, must be automatically removed from any hearing panel regarding the appeal. The Office of the University Secretary after consultation with the Chair will make every reasonable attempt to address any concerns made prior to the hearing date regarding bias by either the Appellant or the Respondent.

UDC Hearing Procedures

2.68 The Appellant must be presumed innocent until the evidence presented indicates that, on the balance of probabilities Disciplinary Action is warranted. The UDC, in weighing the balance of probabilities, must consider the severity of the alleged incident.

2.69 The hearing before the UDC hearing panel must be by way of a trial de novo except where the appeal has been made only in relation to the severity of the Disciplinary Action imposed, such as appeals of Disciplinary Action imposed in relation to the Respectful Work and Learning Environment Policy or the Sexual Violence Policy.

2.70 After an appeal hearing has commenced, the appeal may be withdrawn by the Appellant only with leave of the UDC hearing panel.

2.71 Hearings must be closed unless the Appellant requests in writing at least forty-eight (48) hours before the hearing that a hearing be open and there is no reasonable objection to an open hearing.

2.72 If the appeal hearing is in closed session, no observers may be present in the room. If the appeal hearing is in open session, any observers present will not be allowed to contribute in any way to the proceedings. Regardless of open or closed status, no electronic or other recording devices will be permitted.

2.73 Regardless of section 2.71, hearings related to discipline under the Respectful Work and Learning Environment Policy and/or discipline relating to Sexual Violence must be closed.

Representatives at UDC Hearing

2.74 At the UDC hearing, the Appellant may appear in person and may be represented by a Student Advocate, a representative from the University of Manitoba Student's Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, a member of the Appellant's immediate family, or a lawyer. It is the Appellant's sole responsibility to determine the adequacy of their representation.

2.75 At the UDC hearing, the Respondent may be represented by a lawyer from the University of Manitoba's Office of Legal Counsel.

2.76 If any party intends to have a lawyer present at the hearing, that party must notify the Chair of the UDC at least seven (7) working days prior to the hearing. In that event, the UDC hearing panel may also retain

the services of legal counsel. A rescheduling of the hearing may be required for all parties to retain legal counsel.

2.77 Subject to the notice provision in section 2.76, a representative designated in writing by any party may:

(a) attend the disciplinary hearing; and

(b) participate in any disciplinary hearing to the extent of asking questions of anyone in attendance and making submissions to the UDC.

2.78 The Appellant and the Appellant's designated representative, if any, and the Respondent and the Respondent's representative, if any, shall be entitled to receive in writing, at least five (5) working days before the date set for the hearing, the information that has been submitted to the previous Appeal Body by the parties in accordance with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act.

Failure to Attend UDC Hearing

2.79 An Appellant who fails to attend a scheduled appeal hearing may have the appeal considered on the basis of the Appellant's written submission, the presentation of the Appellant's designated representative, if any, and the verbal and written submissions made by the Respondent.

2.80 The Appellant must be advised that the UDC has made a decision regarding the appeal and that the Appellant has ten (10) days to provide reasons for missing the hearing prior to the implementation of the decision. The Chair must determine whether the hearing should be re-scheduled based on any submission from the Appellant. A reasonable attempt will be made to reconvene the same members should the hearing be re-scheduled.

Evidence at UDC Hearing

2.81 The Appellant, or the Appellant's representative, if any, and the relevant Respondent, or the Respondent's representative, if any, may call witnesses and submit other evidence. The Appellant, or the Appellant's representative, if any, and the relevant Respondent, or the Respondent's representative, if any, are responsible for arranging their own witnesses. If witnesses are to be called, a witness list must be provided by the Appellant or the Appellant's representative, if any, in their original appeal submission provided to the Chair and a witness list must be provided by the relevant Respondent, or the Respondent's representative, if any, with their response to the appeal.

2.82 The Appellant or the Appellant's designated representative, if any, and the Respondent, or the Respondent's representative, if any, must have the right to cross-examine witnesses.

2.83 The Appellant must not be required to give testimony but if the Appellant elects to do so, the Appellant may be cross-examined.

2.84 The UDC may consider confidential information from the University Health Service, Counselling Service, University Chaplains and other similar services which are submitted by these services to the UDC at the request of the Appellant. Such confidential information submitted to the UDC may only be used for the purpose of the appeal and will be treated as other documentation submitted for the appeal hearing as set out in section 2.87.

2.85 Appellants mat not appeal the disposition of a finding under the Respectful Work and Learning Environment Policy or under the Sexual Violence Policy, but may appeal disciplinary action based on that finding. Where an appeal of disciplinary action has been initiated and upon the written request of the Chair of the UDC, the Vice-President (Administration) shall forward to the UDC the report of the investigator for consideration in the disposition of the appeal. Such confidential information submitted to the UDC may only be used for the purpose of the appeal and will be treated as other documentation submitted for the appeal hearing as set out in section 2.87.

2.86 Subject to section 2.78, the Appellant, the Appellant's representative and the relevant Disciplinary Authority normally must have the right to receive a copy of any university document that the UDC or hearing panel considers in relation to the appeal. The Chair of the Committee must make the final determination on this matter.

2.87 All members of the UDC and/or hearing panel will keep all materials and information used for the appeal in strict confidence and surrender such materials to the recording secretary who will have the materials destroyed by way of confidential shredding.

Adjournments

2.88 Requests for adjournment shall be granted within reason.

Disposition

2.89 A decision to uphold or deny an appeal, in whole or in part, and a decision to take different Disciplinary Action, in whole or in part, requires a simple majority.

2.90 If, after hearing all the evidence, the UDC is satisfied on the evidence presented that the Appellant has committed Academic Misconduct or Non-Academic Misconduct, the UDC may dispose of the matter by instituting any Disciplinary Action set out in the column entitled "UDC" in Table 3.

2.91 The Chair of the UDC or hearing panel must, after a decision has been made, report the results of that decision in writing to:

(a) the Appellant or the designated representative of the Appellant, if any;

(b) the Respondent, or the Respondent's representative, if any, from whose decision the appeal has been heard;

(c) the Dean/Director of the Faculty/College/School involved; or the Associate Vice-President (Administration), the Director of Student Residences, or the Chief Information Officer (CIO) of IST, as the case may be;

(d) the Registrar;

(e) the Vice-President (Administration);

(f) the Vice-Provost (Students); or

(g) any others as deemed relevant.

Part III: Accountability

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

3.2 The President or his or her delegate is responsible for the implementation, administration and review of this Appeal Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Appeal Procedure.

Part IV: Review

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

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

(a) the Approving Body deems it necessary or desirable to do so;

(b) the Appeal Procedure is no longer legislatively or statutorily compliant;

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

(d) the Parent Policy is revised or repealed.

Part V: Effect on Previous Statements

5.1 This Appeal Procedure supersedes all of the following:

(a) Student Discipline Procedure, effective January 1, 2009, revised January 26, 2010.

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

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

Part VI: Cross References

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

(a) Student Discipline Bylaw;

(b) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;

(c) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;

(d) Table 3: Disciplinary Actions and Disciplinary Authorities;

(e) Student Academic Misconduct Procedure;

(f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(g) Definitions of Academic Units Policy;

(h) Final Examinations and Final Grades Policy and Procedures;

(i) Respectful Work and Learning Environment Policy;

(j) Sexual Violence Policy;

(k) Disclosures and Complaints Procedure;

(l) Use of Computer Facilities Policy and Procedure;

(m) Violent or Threatening Behaviour Policy and Procedure;

(n) The Freedom of Information and Protection of Privacy Act, C.C.S.M. c. F175;

(o) The Personal Health Information Act, C.C.S.M. c. P33.5.

Student Academic Misconduct Procedure

Part I: Reason for Procedure

1.1 The University of Manitoba emphasizes the importance of academic integrity and works diligently to uphold a rigorous and ethical academic environment.

1.2 The reason for this Procedure is to:

(a) Articulate the University's expectation that all Students maintain the highest standards of integrity;

(b) Outline the jurisdiction for each Disciplinary Authority dealing with the Academic Misconduct of Students; and

(c) Provide a fair and thorough investigation process into allegations of Academic Misconduct.

Part II: Procedure Content

Definitions

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

(a) "Academic Misconduct" has the same meaning as defined in section 2.5 of this Procedure.

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

(c) "Appeal Procedure" means the Student Discipline – Appeal Procedure.

(d) "Bylaw" means the Student Discipline Bylaw.

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

(f) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3.

(g) "Disciplinary Authority" means the disciplinary authority designated to determine a matter of student discipline for Academic Misconduct under Table 1.

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

(i) "Procedure" means this Student Academic Misconduct Procedure.

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

(k) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

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

(m) "Table 1" refers to Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct, which follows the Bylaw.

(n) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

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

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

(q) "University" refers to the University of Manitoba.

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

(s) "UMSS" means the University of Manitoba Security Services.

Scope

2.2 This Procedure applies to Student's academic conduct in relation to any University Matter.

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

(a) University-related activities or events, including but not limited to:

(i) Any activity or event on property owned or controlled by the University;

(ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;

(iii) The offering of any service by the University, including educational services;

(iv) Student placements, practica, or clinical training;

(v) University research activities, whether on or off campus;

(vi) Student and/or employee exchanges arranged in connection with the University;

(vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;

(viii) University field trips, travel-study tours, service-learning activities, and similar activities;

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

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

Academic Misconduct

2.4 As members of the University Community, Students have an obligation to act with academic integrity. Any Student who engages in Academic Misconduct in relation to a University Matter will be subject to discipline.

2.5 "Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the academic integrity of the University, including but not limited to:

(a) Plagiarism – the presentation or use of information, ideas, sentences, findings, etc. as one's own without appropriate attribution in an assignment, test or final examination.

(b) Cheating on Quizzes, Tests or Final Examinations – the circumventing of fair testing procedures or contravention of exam regulations. Such acts may be premeditated/planned or may be unintentional or opportunistic.

(c) Inappropriate collaboration – when a Student and any other person work together on assignments, projects, tests, labs or other work unless authorized by the course instructor.

(d) Duplicate Submission – cheating where a Student submits a paper/assignment/test in full or in part, for more than one course without the permission of the course instructor.

(e) Personation – writing an assignment, lab, test, or examination for another Student, or the unauthorized use of another person's signature or identification in order to impersonate someone else. Personation includes both the personator and the person initiating the personation.

(f) Academic Fraud – falsification of data or official documents as well as the falsification of medical or compassionate circumstances/documentation to gain accommodations to complete assignments, tests or examinations.

2.6 Students will be subject to Disciplinary Action for any instance of Academic Misconduct, regardless of whether such behaviour is covered by other University policies, procedures or bylaws. Matters relating to certain Academic Misconduct may also be subject to additional policies, such as the Responsible Conduct of Research Policy and related procedures.

Jurisdiction of Disciplinary Authority

2.7 The specific jurisdiction of each Disciplinary Authority designated to determine an allegation of Academic Misconduct is set out in Table 1.

2.8 For matters involving the Academic Misconduct of an undergraduate Student, the Disciplinary Authority with the closest connection to the particular alleged Academic Misconduct has jurisdiction over the matter, subject to section 2.10 of this Procedure. However, the Disciplinary Authority must inform the Unit Head of the Student's home Faculty/College/School prior to any investigation.

2.9 Matters involving Academic Misconduct of a graduate Student must be referred directly to the Dean of the Faculty of Graduate Studies who shall, in turn, inform the department head or Unit Head of the Student's home department or Unit prior to any investigation and Disciplinary Action.

2.10 When the alleged Academic Misconduct, if proven on a balance of probabilities, would:

(a) Constitute a second instance of Academic Misconduct by the Student; or

(b) Be of such severity as to warrant a Disciplinary Action that is not available to the Disciplinary Authority with the closest connection to the matter under Table 1 (e.g. Department Head); the matter shall be referred to the next appropriate Disciplinary Authority under Table 1 (e.g. Dean/Director) for investigation and decision.

2.11 If a question arises as to which Disciplinary Authority should hear a particular case, the question must be referred to the President for resolution.

2.12 If the Academic Misconduct relates to a criminal offence, the Disciplinary Authority must provide relevant information to UMSS for potential follow-up by the appropriate policing authority.

Notice to the Student

2.13 If the Disciplinary Authority determines that there is sufficient evidence to initiate an investigation into the allegation of Academic Misconduct under this Student Academic Misconduct Procedure, the Student who is the subject of a disciplinary matter will be informed in writing by the Disciplinary Authority (with a copy to the University's Registrar) that:

(a) An investigation is proceeding in accordance with this Procedure, the nature of the matter being investigated, that the Student may be subject to Disciplinary Action and that a hold will be placed on the Student's record in accordance with section 2.14 of this Procedure until the allegation is investigated;

(b) The Student will be given an opportunity to respond to the allegation and, if a meeting is scheduled, notice will be provided as to who will be present on behalf of the University at the meeting;

(c) The Student may seek advice and representation from a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, a member of the Student's immediate family or other support person as may be appropriate. It is the sole responsibility of the Student to determine the adequacy of the Student's representation;

(d) Failure to respond by a specified date will result in the matter being considered without the Student's response;

(e) The Student may obtain a copy of this Procedure, the Bylaw and related procedures. These documents are available online or from the Office of the University Secretary or the Student Advocacy office;

(f) The Student has a right to appeal in accordance with the Bylaw and Appeal Procedure.

Student Records

2.14 The Disciplinary Authority will request that the Registrar place a hold on the Student's record to prevent the issuance of transcripts, transfers between Faculty/College/School and changes in registrations until the alleged Academic Misconduct is investigated. Until a decision has been made and any appeal process available under the Bylaw has concluded, the Student shall be permitted to continue in the course or program until the case is heard and the Disciplinary Authority must ensure the Student's work continues to be graded normally and is unaffected by the allegation of Academic Misconduct, subject to sections 2.25 and 2.26 of the Bylaw.

Investigation Procedure

2.15 Subject to section 2.16 of this Procedure, the Disciplinary Authority will, either personally or through a designate, conduct an investigation into the allegations of Academic Misconduct in any manner that he or she deems appropriate to the nature of the circumstances and the seriousness of the issues involved and any admissions made during the investigation. This may include some or all of:

(a) Interviewing witnesses;

(b) Reviewing documents and records (both paper and electronic);

(c) Reviewing photographs, audio, and video recordings;

(d) Examining physical evidence;

(e) Arranging for testing of physical evidence;

(f) With the consent of participants, arranging for medical or psychological evaluations; and/or

(g) Submitting a Third Party Data Access Request Form to IST regarding accessing electronic systems and consulting with Access and Privacy Office as required to facilitate the request.

2.16 The Disciplinary Authority may choose not to personally investigate where the issue has been or may be investigated pursuant to another University policy, procedure or bylaw.

2.17 The Disciplinary Authority will conduct the investigation in accordance with the principles of procedural fairness and natural justice. In particular, the Disciplinary Authority will ensure that:

(a) The Student must be informed of the allegations against him or her, including, subject to section 2.26 of this Procedure, having access to all documentary and other evidence relied upon by the Disciplinary Authority and knowing the identity of the complainant;

(b) The Student must be provided an opportunity to respond to the allegations;

(c) While strict rules of evidence do not apply, appropriate weight must be given to evidence based on its credibility and reliability; and

(d) Witnesses may wish to consult with or respond through an advocate (which may include legal counsel, a union representative, or a Student Advocate, as may be appropriate).

2.18 The Disciplinary Authority (or designate) may meet with the Student to present the facts/evidence concerning the allegation and to give the Student an opportunity to respond to the allegation and present his/her explanation of the matter. The Disciplinary Authority will give notice to the Student as to who will be present on behalf of the University at such a meeting.

Decision

2.19 The Disciplinary Authority will inform the Student that a written decision letter will be sent normally within five (5) working days of receiving the Student's response. If the Student does not respond within a reasonable time, the Disciplinary Authority will consider the matter and make a decision in the absence of the Student's response and based on the information that is available.

2.20 At the conclusion of the investigation, the Disciplinary Authority will inform the Student of his or her decision in writing and will include, at minimum, the following:

(a) A summary of the allegation of Academic Misconduct;

(b) A summary of the process and key timelines in the investigation;

(c) A summary of the key evidence obtained through the investigation, including the response of the Student to the allegation;

(d) An indication of which key evidence was considered credible and reliable;

(e) A conclusion as to whether, on a balance of probabilities, the Academic Misconduct occurred;

(f) A summary of the reasons for the conclusion;

(g) A summary of any Disciplinary Action instituted in accordance with the Bylaw and section 2.21 of this Procedure; and

(h) If Disciplinary Action is taken, information about the right to appeal, the time period for appeal, and the person and contact information for the submission of an appeal, in accordance with the Bylaw.

2.21 Where there is a finding of Academic Misconduct, the Disciplinary Authority will consider any previous findings of Academic Misconduct before determining the appropriate Disciplinary Action under the Bylaw. In the case where the Disciplinary Authority is not the Unit Head of the Faculty/College/School in which the Student is registered, the Disciplinary Authority will determine the appropriate Disciplinary Action in consultation with the Unit Head of that Faculty/College/School.

2.22 The Disciplinary Authority will send a copy of their decision to the Registrar and to the Unit Head of the Faculty/College/School in which the Student is registered.

Appeals

2.23 Students have a right to appeal Disciplinary Actions in accordance with the Bylaw and Appeal Procedure.

Obligations of Confidentiality by the University

2.24 In respect of an incidence of Academic Misconduct, the University will not disclose the name of the complainant, the Student, or the circumstances related to the complaint to any person, other than where the disclosure is:

(a) Necessary to investigate the complaint or take corrective action with respect to the complaint; or

(b) Required by law.

2.25 Personal information that is disclosed under section 2.24 above in respect of an incidence of Academic Misconduct will be the minimum amount necessary for the purpose.

Obligations of Confidentiality by the Disciplinary Authority

2.26 The Disciplinary Authority, in conducting the investigation, will comply with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act with respect to personal information and personal health information collected, used and disclosed in the course of the investigation. Where a Disciplinary Authority is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.27 The Disciplinary Authority will advise all persons involved with an investigation as to their obligations regarding confidentiality, and the protections available to them under this Procedure.

Obligations of Confidentiality by the Others

2.28 All persons involved in an investigation of an incident of Non-Academic Misconduct or Concerning Behaviour, whether as a witness or retrieving relevant information or documents, must keep confidential:

(a) The existence and nature of the investigation; and

(b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.29 Notwithstanding section 2.28, the Complainant, the Respondent, and witnesses involved in the investigation may:

(a) Obtain confidential advice (including advice from a Student Advocate or lawyer, as may be appropriate);

(b) Disclose information to others only to the extent reasonably necessary to gather evidence and, in the case of an accused Student, to make full answer and defense to the allegations; and

(c) Use information obtained independent of the investigation in any other forum.

Records Management

2.30 The Disciplinary Authority will maintain files with respect to each complaint in accordance with the Records Management Policy and Procedure.

Part III: Accountability

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

3.2 The President is responsible for the implementation, administration and review of this Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Procedure.

Part IV: Review

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

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

(a) the President or the Approving Body deems it necessary or desirable to do so;

(b) the Procedure is no longer legislatively or statutorily compliant;

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

(d) the Parent Policy is revised or repealed.

Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

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

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

Part VI: Cross References

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

(a) Student Discipline Bylaw;

(b) Table 1: Jurisdiction of Disciplinary Authorities for Academic Misconduct;

(c) Table 3: Disciplinary Actions and Disciplinary Authorities;

(d) Student Discipline - Appeal Procedure;

(e) Definitions of Academic Units Policy;

(f) Responsible Conduct of Research Policy and Procedures;

(g) Records Management Policy and Procedure;

(h) Use of Computer Facilities Policy and Procedure;

(i) Third Party Data Access Request Form;

(j) Student Advocacy Office Policy;

(k) The Freedom of Information and Protection of Privacy Act, CCSM c. F175;

(l) The Personal Health Information Act, CCSM c. P33.5.

Student Non-Academic Misconduct and Concerning Behaviour Procedures

Part I: Reason for Procedure

1.1 The reason for this Procedure is to:

(a) Articulate the University's expectation that all Students act in a fair and reasonable manner toward their peers, the faculty, staff, administration and the physical property of the University;

(b) Outline the jurisdiction for each Disciplinary Authority dealing with the Non-Academic Misconduct of Students;

(c) Provide a fair and thorough investigation process for allegations of Non-Academic Misconduct;

(d) Coordinate an action plan for Students exhibiting Concerning Behaviour that includes supports and a clear referral mechanism for members of the University Community.

Part II: Procedure Content

Definitions

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

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

(b) "Appeal Procedure" means the Student Discipline – Appeal Procedure.

(c) "Bylaw" means the Student Discipline Bylaw.

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

(e) "Disciplinary Action" means the specific disciplinary actions available for each Disciplinary Authority under Table 3.

(f) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Non-Academic Misconduct under Table 2.

(g) "Discrimination" has the same meaning as defined in section 2.3 of the Disclosures and Complaints Procedure.

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

(i) "Harassment" refers to Personal Harassment, Human Rights Based Harassment, and/or Sexual Harassment as defined in section 2.10 of the Disclosures and Complaints Procedure.

(j) "Non-Academic Misconduct" has the same meaning as defined in section 2.5 of this Procedure.

(k) "Procedure" means this Student Non-Academic Misconduct and Concerning Behaviour Procedure.

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

(m) "Sexual Violence" has the same meaning as defined in the Sexual Violence Policy.

(n) "STATIS" means the Student/Staff Threat Assessment Triage Intervention Support team established pursuant to section 2.11 of the Violent or Threatening Behaviour Procedure.

(o) "Student" means any of the following individuals:

(i) Admitted – an individual who has accepted an offer of admission to the University;

(ii) Current – an individual who is either registered in course(s) or in a program of studies at the University or is eligible to continue in their studies at the University either because the individual meets minimum academic performance requirements or will be eligible to continue after discharging a financial hold or serving suspension;

(iii) Former – an individual who has graduated from the University or who has withdrawn (either voluntarily or was required to withdraw).

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

(q) "Table 2" refers to Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct, which follows the Bylaw.

(r) "Table 3" refers to Table 3: Disciplinary Actions and Disciplinary Authorities, which follows the Bylaw.

(s) "UMSS" means the University of Manitoba's Security Services.

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

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

(v) "University" refers to the University of Manitoba.

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

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

(y) "Violence" means:

(i) The attempted or actual exercise of physical force against a person; or

(ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

Scope

2.2 This Procedure applies to a Student's non-academic conduct in relation to any University Matter.

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

(a) University-related activities or events, including but not limited to:

(i) Any activity or event on property owned or controlled by the University;

(ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;

(iii) The offering of any service by the University, including educational services;

(iv) Student placements, practica, or clinical training;

(v) University research activities, whether on or off campus;

(vi) Student and/or employee exchanges arranged in connection with the University;

(vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;

(viii) University field trips, travel-study tours, service-learning activities, and similar activities;

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

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications

through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

Non-Academic Misconduct

2.4 Any Student who engages in Non-Academic Misconduct in relation to a University Matter will be subject to discipline.

2.5 "Non-Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the integrity or proper functioning of the University or the health, safety, rights or property of the University or members of the University Community, such as:

(a) Threats of harm or actual harm by any means (including electronic means) to another person, including but not limited to:

(i) Discrimination;

(ii) Hazing;

(iii) Harassment;

(iv) Possession or use of dangerous objects, in violation of any applicable law;

(v) Sexual Violence;

(vi) Stalking behaviour, including repetitive behaviour directed at a specific person which reasonably causes that person alarm, distress, fear or a change of normal behavior;

(vii) Violence;

(b) Property-related misconduct, including but not limited to:

(i) Theft;

(ii) Threats to or damage of University property;

(iii) Vandalism;

(c) Inappropriate or disruptive behavior, including but not limited to:

(i) Actions which habitually interfere with the learning environment or requires the inordinate time and attention of faculty and staff;

(ii) Alcohol or substance abuse;

(iii) Disorderly behaviour;

(iv) Indecent exposure;

(v) Unprofessional conduct;

(d) Abuse of the process of University policies, procedures or regulations, including but not limited to:

(i) Abuse of computer privileges;

(ii) Breach of student residence rules or regulations;

(iii) Failure to comply with a previously imposed Disciplinary Action;

(iv) Frivolous or vexatious complaints or appeals.

2.6 Students will be subject to Disciplinary Action for any instance of Non-Academic Misconduct, regardless of whether such behaviour is covered by other University policies, procedures or bylaws. Matters relating to certain Non-Academic Misconduct may also be subject to additional policies, such as:

(a) The Respectful Work and Learning Environment Policy and the Complaints and Disclosures Procedure when the matter relates to Discrimination, or Harassment;

(b) The Sexual Violence Policy and the Complaints and Disclosures Procedure when the matter relates to Sexual Violence;

(c) The Violent or Threatening Behaviour Policy and Procedure when the matter relates to Violence, hazing, stalking behaviour, or the possession or use of dangerous objects in violation of any applicable law;

(d) The Use of Computer Facilities Policy and Procedure when the matter relates to abuse of computer privileges;

(e) The Campus Alcohol Policy and Procedure when the matter relates to alcohol or substance abuse;

(f) The student Residence Contract when the matter relates to a breach of student residence rules or regulations.

Jurisdiction of Disciplinary Authority

2.7 The specific jurisdiction of each Disciplinary Authority designated to determine an allegation of Non-Academic Misconduct is set out in Table 2.

2.8 For matters involving the Non-Academic Misconduct of an undergraduate Student, the Disciplinary Authority with the closest connection to the particular alleged Non-Academic Misconduct has jurisdiction over the matter, subject to section 2.10 of this Procedure. However, the Disciplinary Authority must inform the Unit Head of the Student's home Faculty/College/School, and the Vice-Provost (Students), prior to any investigation.

2.9 Matters involving Non-Academic Misconduct of a graduate Student must be referred directly to the Dean of the Faculty of Graduate Studies who shall, in turn, inform the department head of the Student's program, and the Vice-Provost (Students), prior to any investigation.

2.10 When the alleged Non-Academic Misconduct, if proven on a balance of probabilities, would:

(a) Constitute a second instance of Non-Academic Misconduct by the Student; or

(b) Be of such severity as to warrant a Disciplinary Action that is not available to the Disciplinary Authority with the closest connection to the matter under Table 2 (e.g. Department Head); the matter

shall be referred to the next appropriate Disciplinary Authority under Table 2 (e.g. Dean/Director) for investigation and decision.

2.11 If a question arises as to which Disciplinary Authority should hear a particular case, the question must be referred to the President for resolution.

2.12 If the Non-Academic Misconduct relates to a criminal offence, the Disciplinary Authority must provide relevant information to UMSS for potential follow-up by the appropriate policing authority.

Notice to Vice-Provost (Students)

2.13 Before initiating an investigation, the Disciplinary Authority will advise the Vice-Provost (Students) of the following:

(a) An allegation of Non-Academic Misconduct has been received;

(b) The nature of the Non-Academic Misconduct;

(c) The name of the Student alleged to have committed the Non-Academic Misconduct; and

(d) The intention of the Disciplinary Authority to initiate an investigation in accordance with this Procedure.

2.14 The Vice-Provost (Students) will review this information and advise the Disciplinary Authority if he or she feels the matter should be referred to STATIS before the investigation is conducted.

Notice to the Student

2.15 After consultation with the Vice-Provost (Students), the Student who is the subject of a disciplinary matter will be informed in writing by the Disciplinary Authority (with a copy to the University's Registrar) that:

(a) An investigation is proceeding in accordance with this Procedure, the nature of the matter being investigated, that the Student may be subject to Disciplinary Action, and that a hold will be placed on the Student's record in accordance with section 2.16 of this Procedure until the allegation is investigated;

(b) The Student will be given an opportunity to respond to the allegation and, if a meeting is scheduled, notice will be provided as to who will be present on behalf of the University at the meeting;

(c) The Student may seek advice and representation from a Student Advocate, a representative from the University of Manitoba Students' Union, a representative from the Graduate Students' Association, a member of the University Community not receiving payment for appearing, a member of the Student's immediate family, or other support person as may be appropriate. It is the sole responsibility of the Student to determine the adequacy of the Student's representation;

(d) Failure to respond by a specified date will result in the matter being considered without the Student's response;

(e) The Student may obtain a copy of this Procedure, the Bylaw and related procedures. These documents are available online or from the Office of the University Secretary or the Student Advocacy office;

(f) The Student has a right to appeal in accordance with the Bylaw and Appeal Procedure.

Student Records

2.16 The Disciplinary Authority will request that the Registrar place a hold on the Student's record to prevent the issuance of transcripts, transfers between Faculty/College/School and changes in registrations until the alleged Non-Academic Misconduct is investigated. Until a decision has been made and any appeal process available under the Bylaw has concluded, the Student shall be permitted to continue in the course or program and the Disciplinary Authority must ensure the Student's work continues to be graded normally and is unaffected by the allegation of Non-Academic Misconduct, subject to sections 2.25 and 2.26 of the Bylaw.

Investigation Procedure

2.17 Subject to section 2.18 of this Procedure, the Disciplinary Authority will, either personally or through a designate, conduct an investigation into the allegations of Non-Academic Misconduct in any manner that he or she deems appropriate to the nature of the alleged Non-Academic Misconduct, the seriousness of the issues involved, and any admissions made during the investigation. This may include some or all of:

(a) Interviewing witnesses;

(b) Reviewing documents and records (both paper and electronic);

(c) Reviewing photographs, audio, and video recordings;

(d) Examining physical evidence;

(e) Arranging for testing of physical evidence;

(f) With the consent of participants, arranging for medical or psychological evaluations; and/or

(g) Submitting a Third Party Data Access Request Form to IST regarding accessing electronic systems and consulting with Access and Privacy Office as required to facilitate the request.

2.18 The Disciplinary Authority may choose not to personally investigate where the issue has been or may be investigated pursuant to another University policy, procedure or bylaw.

2.19 The Disciplinary Authority will conduct the investigation in accordance with the principles of procedural fairness and natural justice. In particular, the Disciplinary Authority will ensure that:

(a) The Student must be informed of the allegations against him or her, including, subject to section 2.34 of this Procedure, having access to all documentary and other evidence relied upon by the Disciplinary Authority and knowing the identity of the complainant;

(b) he Student must be provided an opportunity to respond to the allegations;

(c) While strict rules of evidence do not apply, appropriate weight must be given to evidence based on its credibility and reliability; and

(d) Witnesses may wish to consult with or respond through an advocate (which may include legal counsel, a union representative, or a Student Advocate, as may be appropriate).

2.20 The Disciplinary Authority (or designate) may meet with the Student to present the facts/evidence concerning the allegation and to give the Student an opportunity to respond to the allegation and present his/her explanation of the matter. The Disciplinary Authority will give notice to

the Student as to who will be present on behalf of the University at such a meeting.

Decision

2.21 The Disciplinary Authority will inform the Student that a written decision letter will be sent normally within five (5) working days of receiving the Student's response. If the Student does not respond within a reasonable time, the Disciplinary Authority will consider the matter and make a decision in the absence of the Student's response and based on the information that is available.

2.22 At the conclusion of the investigation, the Disciplinary Authority will inform the Student of his or her decision in writing and will include, at minimum, the following:

(a) A summary of the allegation of Non-Academic Misconduct;

(b) A summary of the process and key timelines in the investigation;

(c) A summary of the key evidence obtained through the investigation, including the response of the Student to the allegation;

(d) An indication of which key evidence was considered credible and reliable;

(e) A conclusion as to whether, on a balance of probabilities, the Non-Academic Misconduct occurred;

(f) A summary of the reasons for the conclusion;

(g) A summary of any Disciplinary Action instituted in accordance with the Bylaw and section 2.23 of this Procedure; and

(h) If Disciplinary Action is taken, information about the right to appeal, the time period for appeal, and the person and contact information for the submission of an appeal, in accordance with the Bylaw.

2.23 Where there is a finding of Non-Academic Misconduct, the Disciplinary Authority will consider any previous findings of Non-Academic Misconduct before determining the appropriate Disciplinary Action under the Bylaw. In the case where the Disciplinary Authority is not the Unit Head of the Faculty/College/School in which the Student is registered, the Disciplinary Authority will determine the appropriate Disciplinary Action in consultation with the Unit Head of that Faculty/College/School.

2.24 The Disciplinary Authority will send a copy of their decision to the Registrar, to the Vice-Provost (Students), and to the Unit Head of the Faculty/College/School in which the Student is registered.

Appeals

2.25 Students have a right to appeal Disciplinary Actions in accordance with the Bylaw and the Appeal Procedure.

Concerning Behaviour

2.26 "Concerning Behaviour" means any behaviour that, while not indicative of a clear immediate threat, gives rise to a reasonable apprehension that the Student may engage in conduct harmful to him- or herself or to others, including but not limited to:

(a) Threats of self-harm;

(b) Worrisome behavioral changes in an individual, such as changes in appearance, social withdrawal or isolation, apparent detachment from reality, or inordinate interest in or discussion of violent themes or events.

2.27 Where a Student is exhibiting Concerning Behaviour, members of the University Community must report such behaviour to their Unit Head, a member of STATIS, and/or UMSS. The Unit Head of the Student's Faculty/College/School of registration must be consulted and that Unit Head should, where appropriate:

(a) Ensure the Student receives timely voluntary counselling referrals through existing support services at the University, such as the Student Support Case Manager, Student Counselling Centre, University Health Services, and/or the Faculty Counselling Services (College of Medicine);

(b) Use this Procedure, the Student Discipline Bylaw and other policies, procedures and bylaws as appropriate where additional action is necessary to deal with Concerning Behaviour.

2.28 Members of the University Community must report incidents of Concerning Behaviour to UMSS and STATIS where a Student's Concerning Behaviour is affecting the various services and administration offices of the University, or where the Concerning Behaviour is of a nature or quality that likely will result in:

(a) Serious harm to the Student or substantial deterioration of the Student's health; or

(b) Serious harm to another person or property;

2.29 When reporting concerns to STATIS or UMSS, individuals should attempt to provide the following information:

(a) Description of the Concerning Behaviour;

(b) Name of the Student exhibiting the Concerning Behaviour; and

(c) Indication of what action has been taken to date (if applicable), including a description of any meetings with the Student and any assistance provided, including referrals.

2.30 Information regarding Concerning Behaviour that is received during the Student application process must be referred to the Executive Director of Enrolment Services or the Dean of Graduate Studies, as appropriate. If the information is of serious concern to the respective Executive Director of Enrolment Services or the Dean of Graduate Studies, he/she may seek the advice of the University Legal Counsel and may initiate a staff conference of STATIS.

2.31 If a Student does not accept personal responsibility for their Concerning Behaviour or will not accept appropriate referral for voluntary counselling, the Unit Head should proceed as follows:

(a) Advise the Student to seek professional help; and

(b) Contact the Executive Director of Student Support if the Student refuses to voluntarily seek professional help. The Executive Director of Student Support may consult with colleagues to determine whether or not an involuntary psychiatric assessment is advisable according to mental health legislation and regulations.

Confidentiality

Obligations of Confidentiality by the University

2.32 In respect of an incidence of Non-Academic Misconduct or Concerning Behaviour, the University will not disclose the name of the

complainant, the Student, or the circumstances related to the complaint to any person, other than where the disclosure is:

(a) Necessary to investigate the complaint or take corrective action with respect to the complaint;

(b) Necessary to coordinate an action plan for a Student exhibiting Concerning Behaviour that includes supports and a clear referral mechanism for the Student; or

(c) Required by law.

2.33 Personal information that is disclosed under section 2.32 above in respect of an incidence of Non-Academic Misconduct or Concerning Behaviour will be the minimum amount necessary for the purpose.

Obligations of Confidentiality by the Disciplinary Authority

2.34 The Disciplinary Authority, in conducting the investigation, will comply with The Freedom of Information and Protection of Privacy Act and The Personal Health Information Act with respect to personal information and personal health information collected, used and disclosed in the course of the investigation. Where a Disciplinary Authority is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.35 The Disciplinary Authority will advise all persons involved with an investigation as to their obligations regarding confidentiality, and the protections available to them under this Procedure.

Obligations of Confidentiality by the Others

2.36 All persons involved in an investigation of an incident of Non-Academic Misconduct or Concerning Behaviour, whether as a witness or retrieving relevant information or documents, must keep confidential:

(a) The existence and nature of the investigation; and

(b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office.

2.37 Notwithstanding section 2.36, the Complainant, the Respondent, and witnesses involved in the investigation may:

(a) Obtain confidential advice (including advice from a Student Advocate or lawyer, as may be appropriate);

(b) Disclose information to others only to the extent reasonably necessary to gather evidence and, in the case of an accused Student, to make full answer and defense to the allegations; and

(c) Use information obtained independent of the investigation in any other forum.

Records Management

2.38 The Disciplinary Authority will maintain files with respect to each complaint in accordance with the Records Management Policy and Procedure.

Part III: Accountability

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

3.2 The President is responsible for the implementation, administration and review of this Procedure.

3.3 Students, Faculty/College/School Councils, Unit Heads, Academic Staff and employees are responsible for complying with this Procedure.

Part IV: Review

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

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

(a) the President or the Approving Body deems it necessary or desirable to do so;

(b) the Procedure is no longer legislatively or statutorily compliant;

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

(d) the Parent Policy is revised or repealed.

Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

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

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

Part VI: Cross References

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

(a) Student Discipline Bylaw;

(b) Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct;

(c) Table 3: Disciplinary Actions and Disciplinary Authorities;

(d) Student Discipline - Appeal Procedure;

(e) Respectful Work and Learning Environment Policy;

(f) Sexual Violence Policy;

(g) Complaints and Disclosures Procedure;

(h) Residence Contract;

(i) Violent or Threatening Behaviour Policy and Procedure;

(j) Campus Alcohol Policy and Procedure;

(k) Definitions of Academic Units Policy;

(l) Records Management Policy and Procedure;

(m) Use of Computer Facilities Policy and Procedure;

(n) Third Party Data Access Request Form;

(o) Student Advocacy Office Policy;

(p) The Freedom of Information and Protection of Privacy Act, CCSM c. F175;

(q) The Personal Health Information Act, CCSM c. P33.5.

University Parking Regulations

The Policy and Procedure is available online at http://umanitoba.ca/admin/governance/governing_documents#university-community (http://umanitoba.ca/admin/governance/governing_documents/#university-community).

Parking

Part I: Reason for Regulation

1.1 The University of Manitoba recognizes that at any given time there is a large number of Motor Vehicles driving and parking on campus. In order for the University to maintain orderly conduct of parking of Motor Vehicles, Parking Regulations must be established. Furthermore, as an ancillary service, parking must be operated on a cost recovery basis. These regulations set out the rules, fees and remedies available in association with parking on University Property, and they apply to all staff, students, and the general public. The University of Manitoba Act, which is an act of legislature, empowers the University of Manitoba to govern parking on University Property and to make parking regulations. This includes fees and charges for parking violations and actions taken for failure to pay fees and charges.

Part II: Regulation Content

Introduction

2.1 Responsibility for the overall administration and implementation of the Parking Regulations (the "Regulations") of the University of Manitoba (the "University") rests with the Vice-President (Administration), who may from time to time delegate to others aspects of the administration or implementation of the Regulations.

2.2 All members of the University community and persons attending on University Property are required to familiarize themselves and comply with the Regulations.

2.3 The Regulations are in addition to any bylaws of the City of Winnipeg and any legislation and regulations of the Province of Manitoba regulating the operation or use of Motor Vehicles or regulating the crossing of or walking upon roadways by pedestrians.

2.4 Nothing contained in these Regulations shall be deemed to limit the University's remedies or actions, either at law or through the University's policies, in respect of any matter arising under these Regulations.

General Definitions

2.5 The following terms have the following defined meaning for the purpose of this Regulation:

(a) Designated Accessible Parking Area means a parking space designated for individuals with physical disabilities.

(b) Event means any event being held at the Investors Group Field with an expected attendance of 15,000 or more individuals.

(c) Event Day shall mean the date on which there is a scheduled Event at the Investors Group Field.

(d) Investors Group Field Event Designated Parking Lots shall mean any parking lot on University Property, on Event Day, designated and posted by the University as such, and shall not include University Designated Parking Lots.

(e) Motor Vehicles includes reference to motorcycles, mopeds and scooters, and where appropriate, snowmobiles, bicycles, golf carts and all-terrain vehicles.

(f) Parkade means a multilevel structure located on University property designed for the parking of Motor Vehicles

(g) Parking Fee means the fee corresponding to the rates set annually by the Vice-President (Administration) or designate for all available parking permits.

(h) Parking Services means the persons or administrative unit of the University to whom the Vice-President (Administration) may from time to time delegate responsibility for administration of parking permits and for the designation and assigning of parking areas.

(i) Public Pay Parking Area means any parking area on University Property, excluding the Parkade, designated by the University with signage as visitor or casual parking with a parking meter, pay and display dispenser, pay-by-plate parking meter, or mobile payment application, or such other similar technology as may become available.

(j) Reserved Parking Areas means areas designated by the University as reserved 24 hour parking areas located in various parking lots on University Property.

(k) University Designated Parking Lots shall mean any parking lot on University Property, on Event Day, designated and posted by the University as such, and all shall not include Investors Group Field Event Designated Parking Lots.

(l) University Property means property owned and occupied or under the charge or control of the University, including roadways and including property at Investors Group Field and SmartPark.

(m) University Security Services means the administrative unit of the University, the members of which are provincially licensed security guards and may include others contracted by the Vice-President (Administration) from time to time to assist in the implementation of the Regulations.

(n) Violation Notice means a notice or form issued by the University to any operator or owner charged with violation of any of the provisions of this Regulation.

Headings of Paragraphs

2.6 All headings in the Regulations are inserted solely for convenience of reference and shall not be deemed in any way to limit or affect the provisions to which they relate.

Scope of Regulations

2.7 The Regulations, without any exceptions, apply to:

(a) all persons who park, stop or leave a Motor Vehicle on University Property; and

(b) all owners of Motor Vehicles which are parked, stopped or left on University Property.

Procedure Where No Assigned Parking Space Available

2.8 Subject to sections 2.36-2.38 on Event Parking, holders of a valid staff parking permit who find their assigned parking area fully occupied

may park in the next most convenient parking area (other than a reserved parking area, an accessible parking area, a residence student parking area, a metered parking area, a Public Pay Parking Area or a Parkade) and must immediately report the matter to Parking Services. The report should include the Motor Vehicle license number and staff permit number.

2.9 Subject to sections 2.36-2.38 on Event Parking, holders of any other valid parking permit who find their assigned parking area fully occupied should contact Parking Services for directions on where to park without penalty.

Rates

2.10 Rates for all forms of available parking permits at the University (including rates for parking permit replacements) are set annually by the Vice-President (Administration) or designate and are posted at umanitoba.ca/parking (https://umanitoba.ca/parking/).

Parking Permits – General

Eligibility and Priority

2.11 All persons are eligible to apply for a parking permit as hereinafter provided. Priority in allocation of parking permits will be given to full-time staff members and students of the University. Any person applying for a parking permit may be required to provide identification in order to establish eligibility.

Authorization

2.12 On Monday to Friday from 7:30 a.m. to 4:30 p.m, a parking permit is required for any Motor Vehicle parked or left on University Property in an assigned parking area, unless the Motor Vehicle is otherwise parked at a meter, Public Pay Parking Area or Parkade in compliance with the Regulations. A parking permit conveys the authorization by the University for a specific Motor Vehicle, registered with Parking Services, to be parked in an assigned parking area. Registration includes an application form and payment of the Parking Fee. Each permit will indicate the category of parking authorized and, if appropriate, the area on campus where that Motor Vehicle is authorized to park.

Reserved Twenty-Four (24) Hour Parking

2.13 Subject to sections 2.36-2.38 on Event Parking, certain areas in various parking lots will be designated by the University as Reserved Parking Areas. Parking in a Reserved Parking Area is limited to Motor Vehicles displaying a valid parking permit for that specific Reserved Parking Area. Reserved Parking Areas are appropriately signed and identified.

Alternate Parking Permit

2.14 Effective September 13, 2013, alternate parking permits will no longer be issued by Parking Services. All current alternate permit holders may keep their eligibility until such time as they cancel their parking privileges or their termination of employment with the University. Eligible staff members who may be using an alternate vehicle on University Property and previously applied for alternate parking permits may retain their alternate permit upon payment of the appropriate fee in effect at the time of application and provided the second Motor Vehicle is registered and the staff member complies with any University policies, procedures, regulations and other rules then in effect. Where an alternate parking permit has been issued, only one (1) registered Motor Vehicle at any time is authorized to park on University Property at any given time (unless the second registered Motor Vehicle is otherwise parked at a metered or Public Pay Parking Area or Parkade in compliance with the Regulations).

Affixing or Displaying Parking Permits

2.15 Parking permits must be properly affixed or displayed on the Motor Vehicle as follows:

(a) parking permit decals issued by the University must be affixed on the lower corner of the front windshield on the driver's side of the Motor Vehicle. The backing must be removed from the permit and the permit affixed to the glass using the adhesive which is on the permit; and,

(b) parking permit hang tags issued by the University must be displayed according to directions printed on the permit.

2.16 Expired, invalid and cancelled parking permits must be removed from Motor Vehicles immediately after the expiry, invalidation or cancellation date and not displayed in conjunction with a valid parking permit.

Parking Permit Replacement

2.17 Parking permit replacements may be issued, at a predetermined rate, to eligible permit holders when parking permits have been lost or stolen.

2.18 Parking permit replacements may be issued, at no cost, to eligible permit holders where parking permits, through weather damage or fading, are in need of replacement, as determined by Parking Services.

2.19 Where a parking permit replacement is issued, the original parking permit must be returned to Parking Services, unless lost or stolen. If the parking permit has been lost or stolen, an affidavit will be required from the permit holder.

Term of Permit

2.20 Parking permits are issued for a specified period of time, but immediately become invalid upon the happening of any of the following events:

(a) on the date of expiration shown on the parking permit (if applicable);

(b) when the parking permit is displayed on a Motor Vehicle other than the Motor Vehicle for which it was issued;

(c) when the parking permit is not legible or has been altered;

(d) when the parking permit has been cancelled or revoked;

(e) when the parking permit is lost or stolen;

(f) when the Motor Vehicle for which the parking permit is issued has been placed on the University's tow away list;

(g) when the applicant for a parking permit gives false or incorrect information at the time of application; and

(h) when a residence student of the University vacates or is required to vacate a residence located on University Property (even if the property is leased from the University).

Permits Not Transferable

2.21 Parking permits are not transferable and may be used only for the Motor Vehicle in which the permit was issued unless otherwise authorized in writing by Parking Services. Parking permits remain the property of the University and must be destroyed when the permit expires or becomes invalid.

Permits for Persons with Physical Disabilities

2.22 Any persons with physical disabilities may apply to Parking Services for a parking permit for Designated Accessible Parking Areas as determined by Parking Services. In order to qualify for a parking permit for Designated Accessible Parking Areas, a valid Society for Manitobans with Disabilities ("SMD") parking permit must be presented by the permit applicant. The SMD permit expiry date will be relied upon by Parking Services to determine the length of time for which the parking permit for Designated Accessible Parking Areas is required.

2.23 Holders of valid University accessible parking permits who find no signed Designated Accessible Parking Area is available, may park in the next most convenient parking area (other than a residence student parking area, or parking lots N, O and V, as designated by the University) and must immediately report the matter to Parking Services. The report should include the vehicle license number and accessible parking permit number.

Bicycles

2.24 Bicycles should be parked only in proper University bicycle racks or the University Parkade Bike Station. Parking and storing of bicycles inside any University building, or in any manner which may create a problem related to pedestrian safety, building access or maintenance, as determined by the University, is prohibited. Bicycles parked in such a fashion are subject to removal by the University and their owners may be subject to a fee or charge, at rates established by the University, from time to time.

Rights of Cancellation

2.25 Notwithstanding any other provision of these Regulations, the University may withdraw areas normally used for parking and cancel any parking permit if the parking area referred to therein is required for construction or other purposes. If the assigned parking area or any portion thereof for which the parking permit is valid is deemed by the University to be required for other purposes and if alternative parking is not provided by the University, the unearned portion of the Parking Fee, minus any amounts due and owing to the University as fees or charges incurred as a result of parking or leaving Motor Vehicles on University Property in contravention of the Regulations, will be refunded to the registered parking permit holder.

Staff and Student Parking

Application for Parking

2.26 Staff members intending to park a Motor Vehicle, other than a bicycle, on University Property must apply for assigned parking at Parking Services, unless the Motor Vehicle is otherwise parked at a metered parking area, Public Pay Parking Area or Parkade in compliance with the Regulations.

2.27 Students intending to park a Motor Vehicle on University Property must apply for assigned parking at Parking Services or through any other valid registration system authorized by the University, unless the Motor Vehicle is otherwise parked at a metered parking area, Public Pay Parking Area or Parkade in compliance with the Regulations.

Conditions of Parking

2.28 Parking permits authorize the registered permit holder to park in the parking area designated by the parking permit in accordance with the terms and conditions displayed on the parking permit or in the parking contract signed by the permit holder.

2.29 In some parking areas, electricity is supplied to electrical outlets depending on climatic conditions.

Summer Parking Permits

2.30 Summer parking permits may be issued upon application and authorize the registered permit holder to park in the parking area designated by the parking permit during the period of May 1 to August 31 upon payment of fees, to be set by the University and posted on www.umanitoba.ca/parking (http://www.umanitoba.ca/parking/).

Residence Student Parking

2.31 Residence student parking areas are reserved on a twenty-four (24) hour basis for residence students of the University. Residence students who own and operate a Motor Vehicle, while maintaining approved residence on University Property, may apply for available residence parking permits and must submit proof of ownership of the Motor Vehicle acceptable to Parking Services. These permits will be withdrawn by the University if the residence student vacates or is required to vacate residence on University Property, and the unearned portion of the Parking Fee, minus any amounts due and owing to the University as fees or charges incurred as a result of parking or leaving Motor Vehicles on University Property in contravention of the Regulations, will be refunded to the registered parking permit holder.

Visitor Parking

Visitors

2.32 Subject to sections 2.36-2.38 on Event Parking, and unless otherwise posted by the University, visitors may park in metered and Public Pay Parking Areas or a Parkade at the posted rate, on Monday to Friday from 7:30 a.m. to 4:30 p.m. Monday to Friday from 4:30 p.m. to 7:30 a.m. and on Saturdays and Sundays, visitors may park in all parking areas without charge, unless otherwise posted by the University. Visitors must at all times comply with the Regulations.

2.33 Any visitor (including contractors, trades people, and persons attending conferences and seminars) who wishes to park other than at a metered parking area, Public Pay Parking Area or Parkade must obtain written parking authorization through Parking Services in advance and must comply with the Regulations.

2.34 On an Event Day, visitors may not park or leave a Motor Vehicle in any parking area or parkade, except as designated by the University with signage and/or on www.umanitoba.ca/parking (http://www.umanitoba.ca/parking/), beginning ninety (90) minutes before an Event until one (1) hour after an Event.

Couriers

2.35 Courier companies making deliveries to the University are to use designated building loading zones and must comply with the Regulations. Parking is not to exceed the posted allowable time in duration and courier vehicles must be visibly identified as such.

Event Day Parking

Investors Group Field event Designated Parking Lots

2.36 Notwithstanding anything else in these Regulations, beginning ninety (90) minutes before the scheduled start of an Event and until one (1) hour after the end of any Event, no person shall stop, park or leave any Motor Vehicle in any Investors Group Field Event Designated Parking Lot, except in accordance with the authorization granted by a valid Investor's Group Field parking pass or paid Event parking ticket.

University Designated Parking Lots

2.37 Notwithstanding anything else in these Regulations, beginning ninety (90) minutes before the scheduled start of an Event and until one (1) hour after the end of any Event, no person shall stop, park or leave any Motor Vehicle in any University Designated Parking Lot without displaying a valid University of Manitoba parking permit. University

Designated Parking Lots will be available to University of Manitoba parking permit holders on a first-come, first served basis and space will not be guaranteed.

Visitor Parking on Event Day

2.38 Notwithstanding anything else in these Regulations, visitor parking areas at the University of Manitoba during Events will be temporarily unavailable except as designated by the University with signage and/or on www.umanitoba.ca/parking (http://www.umanitoba.ca/parking/). This will include all Public Pay Parking Areas, metered areas and Parkades.

Stalls Equipped With Heater Plugs

Restriction on Use of Power

2.39 No person shall use any plug except for the sole purpose of drawing power for a Motor Vehicle block heater or to charge an electric vehicle in the appropriately designated stall and no device may be used to supply power to another Motor Vehicle.

Faulty Heater Plugs

2.40 Faulty plugs should be reported as soon as possible to the University's Physical Plant Department, or such other or substitute office as may be instituted in its place by the University from time to time.

Liability

2.41 The University, its employees, servants and agents assume no responsibility for any inconvenience, loss of, or damage to, a Motor Vehicle or its contents while on University Property, including, but not limited to any inconvenience, loss or damage caused by or attributable to fire, theft, collision electrical surges or interruptions of the supply of electricity or otherwise.

Parking and Operation of Motor Vehicles

Prohibitions

2.42 No person shall stop, park or leave any Motor Vehicle, except for bicycles, upon any part of University Property except in accordance with the authorization granted by a valid parking permit and the Regulations provided that, bicycles shall remain subject to all other Regulations and policies of the University.

2.43 Except as specifically authorized by a valid parking permit, no person shall stop, park or leave a Motor Vehicle alongside any building on University Property.

2.44 No person shall stop, park, leave or operate a Motor Vehicle on sidewalks, paths, loading zones, landscaped areas or within three (3) meters of a fire hydrant on University Property except in the course of the performance of essential University business.

2.45 No person shall stop, park or leave a Motor Vehicle in specific areas and roadways on University Property identified and signed as fire lanes.

2.46 No person shall stop, park or leave a Motor Vehicle in a metered space on University Property when the meter at that space is hooded.

2.47 No person shall stop, park or leave a Motor Vehicle idling in an area designated by the University as a "No Idling" Zone, on University Property as indicated by appropriate signage.

2.48 No person shall stop, park or leave a Motor Vehicle in a metered space, Public Pay Parking Area, Parkade or in any parking stall on University Property in such a manner that the Motor Vehicle is not wholly within the metered space or parking stall.

2.49 No person shall move, disfigure, or in any way tamper with any parking control signs posted or erected on University Property.

2.50 No person shall stop, park, leave or operate a snowmobile on University Property, unless specifically authorized by the Vice-President (Administration), or designate, who may set terms and conditions in connection with such authorization wherever appropriate.

2.51 No person shall stop, park or leave a Motor Vehicle in a reserved parking area, a signed Designated Accessible Parking Area or a residence parking area at any time without a valid parking permit for that area unless otherwise posted.

2.52 No person shall permit a Motor Vehicle to be stopped, parked or left in a metered space on University Property when the violation signal of the meter indicates a violation or when the pay parking ticket has expired.

2.53 No person shall stop, park or leave a Motor Vehicle within a Public Pay Parking Area, a metered space or a Parkade, without purchasing parking from a pay & display parking dispenser, parking meter, or mobile payment application on University Property.

2.54 No person shall stop, park or leave a Motor Vehicle from 7:30 a.m. to 4:30 p.m., Monday through Friday, in a signed parking area on University Property, without displaying a valid parking permit for that area.

2.55 Prohibitions 2.42 through 2.50 and 2.56 through 2.59 shall be in effect at all times. Prohibitions 2.51 through 2.54 shall apply at all times except on Saturday, Sunday and holidays, unless otherwise posted or noted in the Regulations.

Theft of Service

2.56 No person shall deposit or cause to be deposited in a single or multi-space parking meter, parking pay station or pay & display machine, any substitute for a coin of Canada; or, deface, damage, tamper or impair the working of any single or multi-space parking meter, meter pole, electronic parking pay station, pass card reader, transponder or reader, Parkade ticket terminal, pay & display machine or pay parking lot gate.

2.57 No operator of a Motor Vehicle shall, during the hours of operation, on entry into a Parkade, proceed without first obtaining a pay parking ticket from either the attendant or the automated ticket dispenser for that Parkade. On exiting from that Parkade, no Motor Vehicle operator shall proceed to exit without stopping and submitting the pay parking ticket to either the attendant or an automated pay station or terminal and paying the required fee.

2.58 No operator of a Motor Vehicle shall, during the hours of operation, as posted by the University, on entry into a Public Pay Parking Area, or a multi-space meter area, park without first paying for parking from either the attendant or the automated machine for that area.

2.59 No operator of a Motor Vehicle shall, during the hours of operation, display an altered, forged, copied or stolen parking permit and/or pay & display receipts or any other type of ticket normally issued for parking on University Property.

Parking Signs

2.60 Operators of Motor Vehicles shall obey any parking signs on University Property erected by either the University or with the consent of the University.

Temporary "No Parking" Signs

2.61 Where it is necessary to erect temporary "No Parking" signs in areas normally allotted for parking under the Regulations for such reasons as snow removal, cleaning, construction, special events or other good reasons, as same may be deemed by the University, such "No Parking" signs shall be observed and have priority over normal parking privileges.

Wherever possible, persons temporarily displaced by the erection of such emergency signs will be assigned to other locations.

Fees and Charges

2.62 Authority. Pursuant to subsection 16(1) of The University of Manitoba Act, the University is authorized to impose fees and charges to be paid by owners or operators of Motor Vehicles stopped, parked in or left on University Property in contravention of the Regulations.

2.63 Notice of Parking Violation. A Violation Notice may be issued by the University to any operator or owner charged with violation of any of the provisions hereof. The owner of a Motor Vehicle may be responsible for payment of any fees or charges in connection with the Violation Notice issued to that vehicle unless the owner can prove to the satisfaction of the University that the Motor Vehicle was not being operated by and/or was not parked or left by the owner or by any other person with the owner's express or implied consent

2.64 Failure to Pay Fees or Charges. Violation Notices must be settled within ten (10) days from the date of issue, failing which the University shall proceed to take all necessary legal action to receive payment of such fees and charges together with any costs incurred by the University in taking such legal action.

2.65 Service of Violation Notices. A Violation Notice shall be sufficiently served if served in any of the following ways:

(a) by being handed to the operator of the Motor Vehicle;

(b) by being mailed ,either by regular mail or by electronic mail, to the address of the person registered as the owner of the Motor Vehicle concerned; or,

(c) by such violation notice being attached to, or left under, the windshield wiper or attached to the windshield of the Motor Vehicle.

2.66 Content of Violation Notice. The Violation Notice shall have endorsed thereon the following:

(a) "This parking violation is issued pursuant to section 16 of The University of Manitoba Act by authority of the Board of Governors of the University, or such other substitute office as may be instituted in its place by the University, from time to time, for a contravention of the Parking Regulations".

2.67 Amount of Fees and Charges. Fees and charges for parking violations are as follows:

(a) for all violations other than those listed in subsections (b) to (h):

(i) Option "A" – **Thirty Five Dollars ($35.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **Seventy Dollars ($70.00)** if paid thereafter.

(b) for possession and/or display of a stolen altered, copied or forged parking permit or pay & display parking ticket or receipt or any other type of ticket normally issued for parking on University Property – **Three Hundred and Fifty Dollars ($350.00)** and a charge in an amount equal to the costs that would have been incurred for the purchase of a parking permit or pay parking ticket for the period during which the stolen or forged parking permit or pay parking ticket was being used upon order of the Vice-President (Administration) under section 2.74;

(c) for a violation of sections 2.56 through 2.58 - **Three Hundred and Fifty Dollars ($350.00)** and such amount as the University may deem appropriate in order to compensate the University for losses suffered as a result of damage to property caused by the person, upon order of the Vice-President (Administration) under section 2.75;

(d) for stopping or parking in an Accessible Parking Space:

(i) Option "A" – **One Hundred and Fifty Dollars ($150.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **Three Hundred Dollars ($300.00)** if paid thereafter;

(e) for stopping or parking in a fire lane:

(i) Option "A" – **Fifty Dollars ($50.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **One Hundred Dollars ($100.00)** if paid thereafter; and

(f) for violations of sections 2.36 and/or 2.37:

(i) Option "A" – **Fifty Dollars ($50.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" **Seventy Five Dollars ($75.00)** if paid thereafter.

(g) for displaying an invalid permit or pay parking ticket:

(i) Option "A" – **Seventy Five Dollars ($75.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" **One Hundred and Fifty Dollars ($150.00)** if paid thereafter.

(h) for violations of section 2.48:

(i) Option "A" – **Twenty Dollars ($20.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **Forty Dollars ($40.00)** if paid thereafter.

The University may require payment of fees and/or charges for parking violations under more than one of the above noted subsections, with respect to a single incident, as the University, within its sole discretion may determine is appropriate.

2.68 Voluntary Payment. Any fees or charges issued under sections 2.42-2.59 on Prohibitions may be paid within the time limit indicated on the notice thereof as follows:

(a) by on-line payment, on a twenty-four (24) hour basis, by visiting the University's website at www.umanitoba.ca/parking (http://www.umanitoba.ca/parking/);

(b) by mail or after hours deposit (cheques only) at Parking Services at the Welcome Centre, 423 University Crescent, or such other location as the office may be located in from time to time;

(c) in person Monday to Friday, between the hours of 8:00 a.m. and 4:30 p.m. at Parking Services at the Welcome Centre, 423 University

Crescent, or such other location as the office may be located in from time to time.

2.69 An administration fee will be assessed by the University for all returned NSF cheques and stop payments.

2.70 Stolen, Altered, Copied or Forged Parking Permits and Pay Parking Tickets. Where a person has been found in possession of and/or displaying a stolen, altered, copied or forged parking permit or pay parking ticket any other type of ticket normally issued for parking on University Property:

(a) the unauthorized parking permit or pay parking ticket shall be confiscated;

(b) the person shall pay a fine in accordance with section 2.67 of:

(i) Option "A" - **Seventy Five Dollars ($75.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **One Hundred and Fifty Dollars ($150.00)** if paid thereafter; and

(c) upon the order of the Vice-President (Administration), the person:

(i) shall pay a fee of **Three Hundred and Fifty Dollars ($350.00)**;

(ii) shall be required to make payment to the University in an amount equal to the costs that would have been incurred for the purchase of a parking permit or pay parking ticket for the period during which the stolen or forged parking permit or pay parking ticket was being used or in order to compensate the University for losses suffered as a result of damage to property caused by the person that violated one or more of sections 2.56-2.59; and

(iii) shall not be entitled to, and shall be prohibited from, parking a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be towed away and impounded under Sections 2.76-2.79 on Removal, Impoundment and Liability.

2.71 Violation of Sections 2.56 - 2.59. Where a person has violated one or more of sections 2.56 – 2.59:

(a) the person shall pay a fine in accordance with section 2.67 of:

(i) Option "A" - **Seventy Five Dollars ($75.00)** if paid within ten (10) days of the date the contravention occurred; and

(ii) Option "B" – **One Hundred and Fifty Dollars ($150.00)** if paid thereafter; and

(b) upon the order of the Vice-President (Administration), the person:

(i) shall pay a fee of **Three Hundred and Fifty Dollars ($350.00)**;

(ii) shall pay such amount as the University may deem appropriate in order to compensate the University for losses suffered as a result of damage to property caused by the person that violated one or more of sections 2.56-2.59; and

(iii) shall not be entitled to, and shall be prohibited from, parking a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be towed away and impounded under Sections 2.76-2.79 on Removal, Impoundment and Liability.

Appeals and Extenuating Circumstances

2.72 Those persons wishing to appeal and outline extenuating circumstances, or appeal a Parking Fee or Violation Notice issued under section 2.67 (excluding clauses e-f of section 2.73), may do so as follows:

(a) with respect to fees or charges for parking in contravention of the Regulations – attend to Parking Services at the Welcome Centre, 423 University Crescent, (or such other location as the office may be located in from time to time), Monday through Friday, 8:00 a.m. to 4:30 p.m. respecting a fee or charge; or

(b) with respect to appeals of decisions under (a) above and with respect to the other decisions issued under sections 2.71 through 2.73 inclusive – appeal to the Vice-President (Administration) or such person or body designated by the Vice-President (Administration) in accordance with procedures established from time to time.

Revocation of Parking Permits

2.73 Revocation of Parking Permit. In addition to any other fees or charges provided by the Regulations, a parking permit of an individual violating the Regulations, may be revoked by the Vice-President (Administration) at his/her sole discretion.

2.74 Prohibition from Parking on University Property. Any person whose parking permit is revoked may also be prohibited by the Vice-President (Administration) from parking, stopping or leaving a Motor Vehicle on University Property for a period of up to twelve (12) months, during which time any Motor Vehicle registered to that person may be removed and impounded under sections 2.76-2.79 on Removal, Impoundment and Liability.

Failure to Pay

2.75 Failure to Pay Fees or Charges. Where a person does not pay the fees or charges owing under sections 2.67, 2.70 or 2.71, any one (1) or more of the following actions may be taken by the University:

(a) discipline (including dismissal) of faculty and staff members;

(b) discipline of students under the Student Discipline Bylaw;

(c) withholding of examination marks, transcripts, diplomas, or denying registration and registration materials until the outstanding fees or charges have been paid in full or other arrangements have been made which are satisfactory to the University;

(d) revocation of a parking permit under section 2.71 and prohibition from parking on University Property under section 2.72;

(e) withholding of the issuance of any new parking permits;

(f) removal and impoundment of a Motor Vehicle under sections 2.76-2.79 on Removal, Impoundment and Liability; and

(g) collection activities by the University or by others at the request of the University, including the issuance of a Statement of Claim in a civil court against the owner or operator of a Motor Vehicle for the amount of the fee or charge and all costs relating to and including the costs of removal, impoundment and storage of the

Motor Vehicle, as well as any legal costs incurred by the University in taking such collection activities and/or legal action.

Removal, Impoundment and Liability

2.76 Motor Vehicles parked or left on University Property may be removed, impounded and stored if such Motor Vehicles are considered by the University to be impeding snow removal operations or any other essential operation whatsoever or where removal or impoundment of the Motor Vehicle is deemed to be reasonable in the sole discretion of the University.

2.77 Motor Vehicles parked or left on University Property on an Event Day may be removed, impounded and stored if such Motor Vehicles are parked in in contravention of these Regulations, as determined by the University in its sole discretion.

2.78 In addition to any other fee, charge or consequence provided by these Regulations, a Motor Vehicle removed and impounded under these Regulations shall be at the owner's risk. The owner or operator shall be responsible for the charges incurred for removal, impoundment and storage, which charges must be paid before the Motor Vehicle will be released.

2.79 Neither the University, nor its employees, servants or agents, shall be liable in any way whatsoever for such damage or inconvenience in the event of any damage or inconvenience caused by reason of any Motor Vehicle being towed away, removed, stored or impounded in accordance with these Regulations.

Liability for Lost, Stolen or Damaged Property

2.80 Neither the University, nor its employees, servants or agents, shall be liable in any way whatsoever for any lost, stolen or damaged property contained within the Motor Vehicle or any loss, damage or theft to the Motor Vehicle, notwithstanding that the loss, theft or damage may have occurred while on University Property.

Part III: Accountability

3.1 The Office of Legal Counsel is responsible for advising the Vice-President (Administration) that a formal review of this Regulation is required.

3.2 The Manager, Parking Services is responsible for the implementation, administration and review of this Regulation.

3.3 Students, External Parties and All Employees are responsible for complying with this Regulation.

Part IV: Review

4.1 Governing Document reviews shall be conducted every ten (10) years. The next scheduled review date for this Regulation is March 20, 2022.

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

(a) the Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;

(b) the Regulation is no longer legislatively or statutorily compliant; and/or

(c) the Regulation is now in conflict with another Governing Document.

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

(a) comply with the revised Regulation; or

(b) are in turn repealed.

Part V: Effect on Previous Statements

5.1 This Regulation supersedes all of the following:

(a) Parking for Invited Guests, Visitors, Conference and Special Events Policy;

(b) Parking Regulations (2011)

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

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

Part VI: Cross References

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

(a) http://www.umanitoba.ca/parking (http://www.umanitoba.ca/parking/)

Violent or Threatening Behaviour Policy and Procedure

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

Violent or Threatening Behaviour Policy

Part I: Reason for Policy

1.1 The purpose of this Policy is to:

(a) Outline the University's commitment to creating and maintaining a safe, positive and productive work and learning environment that is free of Violence; and

(b) Set out the actions and measures that the University will take to address the risk of Violence within the University.

Part II: Policy Content

Definitions

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

(a) "Policy" means this Violent or Threatening Behaviour Policy.

(b) "Procedure" means the Violent or Threatening Behaviour Procedure.

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

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

(e) "University Matter" has the same meaning as defined in section 2.3 of this Policy.

(f) "Violence" means:

(i) The attempted or actual exercise of physical force against a person; or

(ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

Scope

2.2 This Policy applies to members of the University Community in relation to any University Matter. Nothing in this Policy is intended to detract from the academic freedom of the University's academic staff.

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

(a) University-related activities or events, including but not limited to:

(i) Any activity or event on property owned or controlled by the University;

(ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;

(iii) The offering of any service by the University, including educational services;

(iv) Student placements, practica, or clinical training;

(v) University research activities, whether on or off campus;

(vi) Student and/or employee exchanges arranged in connection with the University;

(vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;

(viii) University field trips, travel-study tours, service-learning activities, and similar activities;

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

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

Policy Statement

2.4 Individuals who commit Violence in relation to a University Matter will be subject to discipline under the Procedure.

2.5 The University will establish a protocol in accordance with the Procedure for reporting and responding to incidents of Violence and to provide a mechanism to support the maintenance of a safe work and learning environment. The University will make the protocol easily and readily available to the University Community.

2.6 This Policy and the Procedure are not intended to discourage or prevent a complainant from reporting instances of Violence to the police or exercising any other rights, actions or remedies that may be available to him or her under any other law.

Part III: Accountability

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

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

3.3 Board of Governors members, Senate members, faculty/college/school councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers are responsible for complying with this Policy.

Part IV: Authority to Approve Procedures

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

Part V: Review

5.1 Governing Document reviews shall be conducted every three (3) years. The next scheduled review date for this Policy is June 22, 2019.

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

(a) the Vice-President (Administration) or the Approving Body deems it necessary or desirable to do so;

(b) the Policy is no longer legislatively or statutorily compliant; and/or

(c) the Policy is now in conflict with another Governing Document.

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

(a) comply with the revised Policy; or

(b) are in turn repealed.

Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

(a) Violent or Threatening Behaviour Policy, effective March 22, 2006;

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

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

Part VII: Cross References

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

(a) Violent or Threatening Behaviour Procedure;

(b) Sexual Assault Policy;

(c) RWLE and Sexual Assault Procedure;

(d) Vice-President (Administration) Bylaw;

(e) Student Discipline Bylaw;

(f) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(g) Use of Computer Facilities Policy and Procedure;

(h) The Workplace Safety and Health Act, C.C.S.M. c. W210; and

(i) The Workplace Safety and Health Regulation, W210 – 217/2006.

Violent or Threatening Behaviour Procedure

Part I: Reason for Procedure

1.1 The reason for this Procedure is:

(a) To establish a protocol for reporting and responding to incidents of Violence that occur with respect to University Matters and to provide a mechanism to support the maintenance of a safe, positive and productive work and learning environment; and

(b) To comply with The Workplace Safety and Health Regulation, W210 – 217/2006.

1.2 The Policy and this Procedure are not intended to discourage or prevent a complainant from exercising any other rights, actions or remedies that may be available to him or her under any other law.

Part II: Procedural Content

Definitions

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

(a) "Bylaw" means the Student Discipline Bylaw.

(b) "Disciplinary Authority" means the discipline authority designated to determine a matter of student discipline for Non-Academic Misconduct under the Student Discipline Bylaw, the Student Non-Academic Misconduct and Concerning Behaviour Procedure, and Table 2: Jurisdiction of Disciplinary Authorities for Non-Academic Misconduct.

(c) "LASH" means the Local Area Safety and Health committee established by the University of Manitoba in accordance with the provisions of The Workplace Safety and Health Act (Manitoba).

(d) "OSHA" means the Organizational Safety and Health Advisory committee established by the University that will look at safety and health issues that cross department/faculty lines or affect the University as a whole.

(e) "Policy" means the Violent or Threatening Behaviour Policy.

(f) "Procedure" means this Violent or Threatening Behaviour Procedure.

(g) "STATIS" means the Student/Staff Threat Assessment Triage Intervention Support team comprised of the following representatives:

(i) Vice-Provost (Students);

(ii) Associate Vice-President (Human Resources);

(iii) Director, Security Services;

(iv) Executive Director, Student Support;

(v) Student Support Case Manager; and

(vi) Legal Counsel.

(h) "UMSS" means the University of Manitoba's Security Services.

(i) "Unit" means a faculty, school, college, institute, centre, academic support unit (for example, libraries) or administrative unit whose Unit Head reports to the President or a Vice-President, Associate Vice-President or Vice-Provost. An academic department within a faculty or school is not a Unit as the term is used within these Procedures.

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

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

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

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

(n) "Violence" means:

(i) The attempted or actual exercise of physical force against a person; or

(ii) Any threatening statement or behaviour that gives a person reasonable cause to believe that physical force will be used against the person.

Scope

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

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

(a) University-related activities or events, including but not limited to:

(i) Any activity or event on property owned or controlled by the University;

(ii) The leasing of space, including student residence rooms, on property owned or controlled by the University;

(iii) The offering of any service by the University, including educational services;

(iv) Student placements, practica, or clinical training;

(v) University research activities, whether on or off campus;

(vi) Student and/or employee exchanges arranged in connection with the University;

(vii) Social events or networking, where matters regarding the University or members of the University Community are a significant focus of the activity;

(viii) University field trips, travel-study tours, service-learning activities, and similar activities;

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

(i) Any aspect of the employment or engagement of employees and contractors for roles and projects substantially connected to the University;

(ii) Participation on a committee or board as a representative of the University;

(iii) Writings, photographs, artwork, audio or video recordings, and/or electronic communications, including communications through social media, where matters regarding the University or members of the University Community are a significant focus of the communication;

(iv) Matters related to The University of Manitoba Students' Union, the Graduate Students' Association, and their affiliated student groups to the extent that it affects the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments; or

(v) Matters of off-campus conduct that have, or might reasonably be seen to have an adverse effect on the proper functioning of the University or the rights of a member of the University Community to use and enjoy the University's learning and working environments.

Immediate Response Protocol

2.4 In the event of imminent bodily harm, individuals should call 911 and UMSS. When reporting an incident, individuals should attempt to provide the following information:

(a) A complete description of the incident(s) involving Violence;

(b) Name(s) of individuals involved in the incident(s);

(c) Description of individual(s), if name(s) not known;

(d) Name(s) of witness(es) or description, if name(s) not known; and

(e) Location of the incident(s).

2.5 Where a report of Violence is received by UMSS, UMSS shall respond as soon as reasonably possible and the Director of UMSS (or designate) shall be notified.

2.6 Without limiting the scope of their jurisdiction and/or mandate, UMSS may take any one or more of the following actions in response to a report of Violence, as reasonably determined by UMSS:

(a) Restore order in violent situations;

(b) Arrest individual(s) in accordance with section 494(1) of the Criminal Code;

(c) Contact Winnipeg Police Service;

(d) Arrange medical assistance;

(e) Take statement(s) of witness(es);

(f) Make appropriate referrals; and

(g) Take immediate action to facilitate the removal or banning of individuals from University property.

2.7 Any decision under section 2.6(g) above to remove an individual from University property shall be effective immediately, subject to review by the Vice President (Administration). The Chief Risk Officer, the appropriate Unit Head, and STATIS shall be advised of the action as soon as possible.

2.8 The Director of Security Services shall in all cases file a written report with the Vice-President (Administration) on the next business day describing any action taken under section 2.6(g) above.

2.9 Members of the University Community, including students and employees, who have been harmed as a result of an incident of Violence, are encouraged to consult with a health care provider for treatment or referral for post-incident counselling, if appropriate.

2.10 For students affected by Violence, the University will:

(a) Provide reasonable academic accommodations (such as extensions on assignments, deferrals of exams, leaves of absences, authorized withdrawals, etc.).

(b) Create a safety plan in consultation with the University's Student Support Case Manager, UMSS, and other offices as appropriate.

2.11 For employees affected by Violence, the University will:

(a) Provide reasonable work accommodations, in consultation with Human Resources; and

(b) Create a safety plan, in consultation with the Unit Head, UMSS and other offices as appropriate.

Report to STATIS

2.12 Where a report of Violence is received by STATIS under section 2.7 of this Procedure, the role of STATIS will be to:

(a) Develop an action plan to assist and support the members of the University Community affected by the Violence;

(b) Ensure that members of the University Community affected by the Violence are consulted where appropriate and kept informed of the developments within the parameters of confidentiality;

(c) Make recommendations to the appropriate Unit Head and/or Disciplinary Authority; and

(d) Take all necessary action relative to the above.

2.13 A coordinator for STATIS shall be appointed for each incident as follows:

(a) If the conduct of a Student is the source of concern, the coordinator will be the Vice-Provost (Students) (or a designate);

(b) If the conduct of an employee is the source of concern, the coordinator will be the Associate Vice-President (Human Resources) (or a designate); and

(c) If the conduct of any other member of the University Community is the source of concern, the coordinator will be the Director of Security Services (or a designate).

2.14 The coordinator of STATIS will have the following responsibilities:

(a) Bring together STATIS and, where necessary, experts and other University personnel;

(b) Coordinate internal and external communication;

(c) Maintain confidential records and ensure the Vice-President (Administration) is informed of developments as appropriate;

(d) Convene debriefing sessions; and

(e) Prepare a final report and recommendation in relation to any decision taken by UMSS under section 2.6(g) above, to be delivered to the Vice-President (Administration) for final determination, with a copy to the Chief Risk Officer and the Unit Head of any Unit affected by the Violence.

Investigation

2.15 As soon as reasonably practicable after an incident of Violence, the University shall investigate the incident as follows:

(a) Where the individual is an employee, the Unit Head for the employee's Unit will investigate the allegation in consultation with STATIS and Human Resources, and in accordance with applicable legislation, common law, collective agreements, and University policies, procedures and bylaws;

(b) Where the individual is a student, the Disciplinary Authority under the Bylaw and related procedures will investigate the allegation in consultation with STATIS and in accordance with the Student Non-Academic Misconduct and Concerning Behaviour Procedure; and

(c) Where the individual is neither an employee nor a student, the Director of UMSS will investigate the allegation in accordance with applicable legislation, common law, and University policies, procedures and bylaws.

2.16 The Unit Head of any affected Unit, in consultation with the Office of Risk Management, will implement any control measures that are identified as a result of the investigation that will eliminate or control the risk of Violence to individuals in their Unit.

Discipline

2.17 Individuals who are found to have engaged in Violence under this Policy will be subject to disciplinary action as follows:

(a) Where the individual is an employee, the discipline will be implemented pursuant to and in accordance with applicable legislation, common law, collective agreements, and University policies, procedures and bylaws.

(b) Where the individual is a student, the discipline will be implemented in accordance with the Student Discipline Bylaw and the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

(c) Where the individual is neither an employee nor a student, the Vice-President (Administration) or designate may make any determination regarding the individual's continued access to the University in accordance with the Procedure and the Vice-President (Administration) Bylaw.

2.18 The Office of Risk Management must be advised of any decision taken under section 2.17 above.

2.19 The University may take disciplinary/legal action against any individual who submits a frivolous or vexatious complaint under this Policy, or who interferes with an investigation of a complaint under this Policy.

Violence Prevention Plan

2.20 Subject to section 2.26 of this Procedure and in consultation with the Office of Risk Management, the Unit Head shall advise all employees for which they are responsible of the risk of Violence in the Unit, including the nature and extent of the risk and the risk of Violence from persons whom the employees are likely to encounter in the course of their work.

2.21 In accordance with The Workplace Safety and Health Regulation, each Unit Head shall, no less than annually:

(a) Consult with the employees in their Unit, the applicable LASH committee, and the Office of Risk Management to review and develop the violence prevention plan that will be implemented by their Unit;

(b) Ensure that all employees in their Unit have received appropriate training in the Policy, this Procedure, and the violence prevention plan for their Unit; and

(c) Review the mechanisms in place to ensure that employees in their Unit comply with the Policy, this Procedure, and the violence prevention plan for their Unit.

2.22 The violence prevention plan referred to in section 2.21 above shall provide information on the following matters:

(a) A description of:

(i) Any particular worksite in their Unit of which the University is aware that an incident of Violence has occurred or may reasonably be expected to occur; and

(ii) Any particular job functions at the workplace where an employee performing their job function has been, or may reasonably be expected to be, exposed to the incident of Violence;

(b) The measures the University will implement to eliminate the risk of Violence in the Unit, or the measures that the University will implement to control that risk if it is not reasonably practicable to eliminate it;

(c) The measures and procedures that the University has in place for summoning immediate assistance when an incident of Violence occurs or is likely to occur in the Unit;

(d) A statement directing the employee to review the Policy and this Procedure, as well as any other documents that will outline the measures and procedures that the University has in place for summoning immediate assistance when an incident of Violence occurs or is likely to occur; and

2.23 The violence prevention plan shall be communicated to all employees in the Unit immediately at the time of hire and shall be posted online or in the Unit for quick reference by employees.

Annual Report

2.24 Annually, the Office of Risk Management will prepare a report that compiles:

(a) A record of the incidents of Violence in each Unit of the University, if any;

(b) The results of any investigation into an incident of Violence, including a copy of:

(i) Any recommendations for control measures or changes to the violence prevention policy for the affected Unit; and

(ii) Any report prepared under in respect of such an incident;

(c) The control measures, if any, implemented as a result of an investigation into an incident.

2.25 The annual report will be provided to the Vice-President (Administration) and to OSHA.

Obligations of Confidentiality by the University

2.26 In respect of an incidence of Violence, the University will not disclose the name of the complainant, the name of the respondent, or the circumstances related to the complaint to any person, other than where the disclosure is:

(a) Necessary in order to investigate the complaint;

(b) Required in order to take corrective action in response to the complaint; or

(c) Required by law, including but not limited to the University's legal obligations under the Workplace Safety and Health Regulation (Manitoba).

2.27 Personal information that is disclosed under section 2.26 above in respect of an incidence of Violence must be the minimum amount necessary for the purpose.

Obligations of Confidentiality by Others

2.28 All persons involved in an investigation of an incident of Violence, whether as a witness or retrieving relevant information or documents, must keep confidential:

(a) The existence and nature of the investigation; and

(b) Any information or documentation obtained as a result of the investigation; which information may only be disclosed to those who reasonably need to know. Where an individual is unsure of whether they may disclose particular information, they may seek advice from the Access and Privacy Office or from STATIS.

2.29 Notwithstanding section 2.28 above, any person involved in an investigation may:

(a) Obtain confidential advice (including advice from a student advocate, union representative, lawyer, or support person(s), as may be appropriate);

(b) Disclose information to others only to the extent reasonably necessary to gather evidence and to make full answer to any allegations; and

(c) Use information obtained independent of the investigation in any other forum.

Legislated Review of the Procedure

2.30 In accordance with The Workplace Safety and Health Act (Manitoba), the OSHA shall review these Procedures every three (3) years and make any recommendations it feels are necessary and advisable.

Part III: Accountability

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

3.2 The Chief Risk Officer or designate is responsible for the implementation, administration and review of this Procedure.

3.3 Board of Governors members, Senate members, faculty/college/school councils, employees, anyone holding an appointment with the University, Students, volunteers, external parties, contractors and suppliers are responsible for complying with this Procedure.

Part IV: Review

4.1 Governing Document reviews shall be conducted every three (3) year. The next scheduled review date for this Procedure is June 22, 2019.

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

(a) the Vice-President (Administration) deems it necessary or desirable to do so;

(b) the Procedure is no longer legislatively or statutorily compliant;

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

(d) the Parent Policy is revised or repealed.

Part V: Effect on Previous Statements

5.1 This Procedure supersedes all of the following:

(a) Violent or Threatening Behaviour Procedure, effective March 17, 2009;

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

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

Part VI: Cross References

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

(a) Violent or Threatening Behaviour Policy;

(b) The Workplace Safety and Health Act, C.C.S.M. c. W210;

(c) The Workplace Safety and Health Regulation W210 – R.M. 217/2006;

(d) Health and Safety Policy;

(e) Safety Committees Procedure;

(f) Respectful Work and Learning Environment Policy;

(g) Sexual Assault Policy;

(h) RWLE and Sexual Assault Procedure;

(i) Student Non-Academic Misconduct and Concerning Behaviour Procedure;

(j) Student Discipline Bylaw; and

(k) Use of Computer Facilities Policy and Procedure.

Voluntary Withdrawal Policy

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

Part I: Reason for Policy

1.1 The University of Manitoba provides Students with sufficient time to plan their schedules through the registration cycle with both academic and personal circumstances in mind. The registration cycle is characterized by the Registration Period, the Registration Revision Period, and the Voluntary Withdrawal Period. The purpose of this Policy is to define and establish the requirements and limitations for Voluntary Withdrawal during the Voluntary Withdrawal Period at the University.

Part II: Policy Content

Definitions

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

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

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

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

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

(e) “Grade Point” refers to a numerical value assigned to a letter grade received in a course.

(f) "Grade Point Average" or "GPA" refers to the average grade of courses completed at the same Level, which is calculated by dividing the total quality points earned by the number of credit hours attempted.

(g) "Leave of Absence" is a period of leave established, administered, and approved by the Faculty/College/School that enables Students to temporarily withdraw from the University.

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

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

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

(k) "Policy" means this Voluntary Withdrawal Policy.

(l) “Quality Points” is the grade point value of the assigned Letter Grade multiplied by the credit hours of the course.

(m) "Registration Period" is the period prior to the beginning of classes in which new and returning Students may register.

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

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

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

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

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

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

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

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

General

2.2 A Voluntary Withdrawal is to be distinguished from other University withdrawal options, such as Authorized Withdrawal, Leaves of Absence, withdrawal during the Registration Revision Period, or withdrawal pursuant to other University-approved policies or regulations.

2.3 Students at the undergraduate Level are generally permitted to VW from a course or courses without receiving prior approval from their Faculty/College/School.

2.4 In the event that a Student chooses to VW from a course with a co-requisite, the Student must also VW from the co-requisite course. To determine if a course has a co-requisite, Students should consult the Calendar and the course descriptions in the chapter of the Faculty/College/School offering the course.

2.5 Students at the graduate Level are not permitted to VW from a course or courses without receiving the approval of the advisor/advisory committee, the head or graduate chair in the department in which the Student is registered, and the Faculty of Graduate Studies.

2.6 Students may withdraw from a course(s) without academic penalty during the Voluntary Withdrawal Period, which begins at the end of the Registration Revision Period and ends on the VW deadline, as follows:

(a) The 48th teaching day for courses taught over a single Term;

(b) The end of the Registration Revision Period of the second Term for courses taught over two or more Terms;

(c) A date calculated using a pro-rated number of teaching days for Summer Term or other Irregularly Scheduled Courses, as published yearly in the Calendar.

2.7 Ceasing to attend a class or classes will not constitute an official withdrawal from that course. Students who do not VW from a course will remain enrolled in and will receive a final grade for that course.

2.8 Students who have elected to VW from a course cannot subsequently re-enroll in that course, except in accordance with the Repeated Course Policy.

Scope

2.9 This Policy applies only to Voluntary Withdrawal during the current Term. Students wishing to withdraw for medical or compassionate reasons should consult the Authorized Withdrawal Policy and Procedure, and provisions regarding Leaves of Absence as outlined in the Calendar.

Responsibilities of the Student

2.10 Students are responsible for considering all implications prior to VW. Withdrawal from a course or courses may affect academic progression, financial aid eligibility, CIS athletic eligibility, entrance into professional and graduate programs, and/or student visa requirements.

Responsibilities of the Faculties/Colleges/Schools

2.11 Voluntary Withdrawal may be considered, together with course failures or repeats, when the Faculty of Graduate Studies or another Faculty/College/School with limited enrolment is reviewing applications for admission into its programs.

2.12 Faculties/Colleges/Schools may, subject to the approval of Senate, deny access to VW for all Students enrolled in an identified academic program. Faculties/Colleges/Schools are required to notify all applicants to that program of this proscription.

Official Records

2.13 A Voluntary Withdrawal shall be recorded on the Student History and Official Transcript issued by the University.

2.14 Final grades for courses in which Students ceased attending, without an official VW, will be included on the Student History and Official Transcript issued by the University, and will be factored into the Student's Grade Point Average.

Part III: Accountability

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

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

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

Part IV: Authority to Approve Procedures

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

Part V: Review

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

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

(a) the Provost and Vice-President (Academic) or the Approving Body deems it necessary or desirable to do so;

(b) the Policy is no longer legislatively or statutorily compliant; and/or

(c) the Policy is now in conflict with another Governing Document.

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

(a) comply with the revised Policy; or

(b) are in turn repealed.

Part VI: Effect on Previous Statements

6.1 This Policy supersedes all of the following:

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

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

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

Part VII: Cross References

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

(a) Authorized Withdrawal Policy;

(b) Definitions of Academic Units Policy;

(c) Grade Point Averages Policy; and

(d) Repeated Course Policy.

General Academic Regulations

Introduction

This chapter contains the regulations and requirements that apply to all students, regardless of faculty or school.

Each faculty and school has its own supplementary regulations and requirements. These are published in the faculty or school chapters of the Academic Calendar. Some faculties and schools also have additional regulations and requirements governing their programs; these are available from the faculty or school.

It is the responsibility of each student to be familiar with the academic regulations and requirements of the University of Manitoba in general and of the specific academic regulations and requirements of their faculty or school of registration. Accordingly, students are asked to seek the advice of advisors in faculty and school general offices whenever there is any question concerning how specific regulations apply to their situations.

Residence and Written English and Mathematics Requirements

Residence Requirements For Graduation

Each faculty and school recommends to the Senate the number of credit hours each student must complete in order to graduate from its programs. Senate also requires each student to complete a minimum number of credit hours at the University of Manitoba -- this is called the "residence requirement."

Unless otherwise stated in faculty and school chapters, the minimum residence requirement of the University of Manitoba is the work normally associated with one year in the case of programs of three years' duration, and two years for programs of four years' duration. Some faculties and schools may have additional residence requirements specified in their program regulations. However, in all cases, the residence requirement is assessed following an appraisal of the educational record of the student applying to transfer credits from another institution or applying to earn credits elsewhere on a letter of permission. The residence requirement is not reduced for students whose "challenge for credit" results in a passing grade.

University English and Mathematics Requirements for Undergraduate Students

All students are required to complete, within the first 60 credit hours of their programs, a minimum of one three credit hour course with significant content in written English, and a minimum of one three credit hour course with significant content in mathematics.

Some degree programs have designated specific written English and mathematics courses to fulfil this requirement.

Price Faculty of Engineering have their own written English requirements (https://catalog.umanitoba.ca/undergraduate-studies/engineering/#Written-English-Engineering).

Some degree programs require that the written English and/or mathematics requirements be completed prior to admission.

See the program descriptions in the faculty and school chapters of the Academic Calendar for details.

Exemptions to the Written English and Mathematics Requirement

- All students with completed baccalaureate degrees and who transfer into any program to which these requirements apply.
- Registered Nurses entering the Bachelor of Nursing Program for Registered Nurses.
- Students admitted before the 1997-98 Regular Session.
- Written English exemption only: Students transferring from Université de Saint-Boniface who have completed a written French requirement (at the university) before transferring to the University of Manitoba will be deemed to have met the written English requirement.

Approved English and Mathematics Courses

A complete list of all courses which satisfy the university written English and mathematics requirement is provided below. (When searching for courses in Aurora, students may search Course Attributes for courses that satisfy the written English and Mathematics requirements).

Note that some programs may restrict the choice of English or Mathematics courses. See the program descriptions in the faculty and school chapters of the Academic Calendar for details.

Written English Courses

Course	Title	Hours
AGRI 2030	Technical Communications	3
ANTH 1520	Critical Cultural Anthropology	3
ANTH 2020	Relatedness in a Globalizing World	3
ANTH 3330	Sex and Sexualities	3
ARTS 1110	Introduction to University	3
ASIA 1420	Asian Civilizations to 1500 (B)	3
ASIA 1430	Asian Civilization from 1500 (B)	3
CATH 1190	Introduction to Catholic Studies	3
CATH 2010	Literature and Catholic Culture 1	3
CATH 2020	Literature and Catholic Culture 2	3
CLAS 2612	Greek Literature in Translation	3
CLAS 2622	Latin Literature in Translation	3
ENGL 0930	English Composition	3
ENGL 0940	Writing About Literature	3
ENGL 1XXX	All English courses at the 1000 level	
ENGL 2XXX	All English courses at the 2000 level	

ENGL 3XXX	All English courses at the 3000 level	
ENGL 4XXX	All English courses at the 4000 level	
ENVR 2810	Environmental Critical Thinking and Scientific Research	3
FAAH 2930	Writing about Art	3
FILM 2280	Film and Literature	6
FORS 2000	Introductory Forensic Science	3
GEOG 2900	Geography of Canadian Prairie Landscapes (A)	3
GEOL 3130	Communication Methods in the Geological Sciences	3
GMGT 1010	Business and Society	3
GMGT 2010	Business Communications	3
GPE 2700	Perspectives on Global Political Economy	3
GRMN 1300	Masterpieces of German Literature in English Translation (C)	3
GRMN 1310	Love in German Culture in English Translation (C)	3
GRMN 2120	Introduction to German Culture from 1918 to the Present (C)	3
GRMN 2130	Introduction to German Culture from the Beginnings to 1918 (C)	3
GRMN 2500	Special Topics in German in English Translation (C)	3
GRMN 2510	German Fairy Tales from the Brothers Grimm to Hollywood (C)	3
GRMN 2520	Spies: Stories of Secret Agents, Treason, and Surveillance (C)	3
GRMN 2530	My Friend the Tree: Environment and Ecology in German Culture in English Translation (C)	3
GRMN 3262	Representations of the Holocaust in English Translation (C)	3
GRMN 3270	Studies in Contemporary German Cinema (C)	3
GRMN 3282	Sex, Gender and Cultural Politics in the German-Speaking World in English Translation (C)	3
GRMN 3390	German Representations of War (C)	3
GRMN 3510	Special Topics in German in English Translation (C)	3
GRMN 3530	Special Topics in Comparative German and Slavic Studies (C)	3
HIST 1XXX	All History courses at 1000 level	
HIST 2XXX	All History courses at 2000 level	
HNSC 2000	Research Methods and Presentation	3
HYGN 1340	Communications	2
INDG 2020	The Métis in Canada	3
INDG 2110	Introduction to Indigenous Community Development	3
INDG 2530	Introduction to Indigenous Theory	3
KPER 2120	Academic Skills in Kinesiology and Recreation Management	3
LABR 1260	Working for a Living	3
LABR 1290	Introduction to the Canadian Labour Movement	3
LABR 2200	Labour History: Canada and Beyond (C)	3
LABR 2300	Workers, Employers and the State	3
LABR 4510	Labour Studies Field Placement Seminar	3
LAW 1540	Legal Methods	5
LAW 2650	Introduction to Advocacy	3
LING 2740	Interpretation Theory	3
PHIL 2612	A Philosophical History of Science	3
PHIL 2614	Philosophy of Science	3
PHIL 2790	Moral Philosophy	6
PHIL 3220	Feminist Philosophy	3
POL 1900	Love, Heroes and Patriotism in Contemporary Poland	3
POL 2600	Polish Culture until 1918	3
POL 2610	Polish Culture 1918 to the Present	3
POL 2660	Special Topics in Polish Literature and Culture	3
POLS 1502	Introduction to Political Studies	3
PSYC 2500	Elements of Ethology	3
PSYC 3380	Nature, Nurture and Behaviour	3
PSYC 4520	Honours Research Seminar	6
RLGN 1440	Evil in World Religions	3
RLGN 2032	Introduction to the Study of Religion	3
RLGN 2036	Introduction to Christianity	3
RLGN 2052	Conservative Christianity in the United States	3
RLGN 2112	Medicine, Magic, and Miracle in the Ancient World	3
RLGN 2116	Cognitive Science and Religion	3
RLGN 2140	Introduction to Judaism	3
RLGN 2160	Hebrew Bible (Tanakh/"Old Testament")	3
RLGN 2162	Great Jewish Books	3
RLGN 2170	Introduction to the New Testament	3
RLGN 2222	The Supernatural in Popular Culture	3
RLGN 2590	Religion and Social Issues	3
RLGN 2770	Contemporary Judaism	3
RLGN 3102	Myth and Mythmaking: Narrative, Ideology, Scholarship	3
RLGN 3280	Hasidism	3
RUSN 1400	Masterpieces of Russian Literature in Translation	3
RUSN 1410	Love in Russian Culture in English Translation	3
RUSN 2280	Russian Culture until 1900	3
RUSN 2290	Russian Culture from 1900 to the Present	3
RUSN 2310	Exploring Russia through Film	3
RUSN 2410	Russian Literature after Stalin	3
RUSN 2600	Special Topics in Russian Culture in English Translation	3
RUSN 2740	Literature and Revolution	3
RUSN 3770	Tolstoy	3
SLAV 3530	Special Topics in Comparative German and Slavic Studies	3
SOC 3100	Practicum in Criminological/Sociological Research	6
SOC 3350	Feminism and Sociological Theory	3
UKRN 2200	Ukrainian Myth, Rites and Rituals	3
UKRN 2410	Ukrainian Canadian Cultural Experience	3
UKRN 2590	Ukrainian Literature and Film	3
UKRN 2600	Special Topics in Ukrainian Studies	3
UKRN 2770	Ukrainian Culture until 1900	3
UKRN 2780	Ukrainian Culture from 1900 to the Present	3
UKRN 2820	Holodomor and Holocaust in Ukrainian Literature and Culture	3
UKRN 3970	Women and Ukrainian Literature	3

WOMN 1500	Introduction to Women's and Gender Studies in the Humanities	3
WOMN 1600	Introduction to Women's and Gender Studies in the Social Sciences	3
WOMN 2560	Women, Science and Technology	3
WOMN 3520	Transnational Feminisms	3

Mathematics Courses

Course	Title	Hours
AGRI 2400	Experimental Methods in Agricultural and Food Sciences	3
ECON 2040	Quantitative Methods in Economics	3
FA 1020	Mathematics in Art	3
GEOG 3810	Quantitative Research Methods in Geography (TS)	3
MATH 1XXX	All Mathematics courses at 1000 level	
MATH 2XXX	All Mathematics at 2000 level	
MATH 3XXX	All Mathematics at 3000 level	
MATH 4XXX	All Mathematics at 4000 level	
MUSC 3230	Acoustics of Music	3
PHIL 1300	Introduction to Logic	3
PHIL 2200	Intermediate Logic	3
PHYS 1020	General Physics 1	3
PHYS 1030	General Physics 2	3
PSYC 2260	Introduction to Research Methods in Psychology	3
SOC 2294	Understanding Social Statistics	3
STAT 1XXX	All Statistics courses at 1000 level	
STAT 2XXX	All Statistics courses at 2000 level	
STAT 3XXX	All Statistics courses at 3000 level	
STAT 4XXX	All Statistics courses at 4000 level	

Course Identification

Credit Hours (Cr.Hrs.)

Each faculty and school develops courses for its degree credit programs, subject to Senate approval, and assigns a credit hour value to each course.

The credit hours for a course are expressed as a number associated with the course which indicates its relative weight. There is a correlation between class hours and credit hours (i.e. 6 credit hours = 3 hours a week, two terms; and 3 credit hours = 3 hours a week, one term).

For the purposes of registration, courses taught over both the Fall and Winter Terms have been divided into two parts. The credit hour value of the course are divided equally and applied to each part of the course. For example: for a six credit hour spanned course each of the Fall and Winter Term parts of the course will be assigned the value of three credit hours. Students registering for term spanning courses will receive one grade for the course and only when the second part is completed. The course grade will be applied to both the Fall and Winter parts of the course.

Prerequisite and Co-requisite Courses

Prerequisite: If a course is prerequisite for a second course, the prerequisite must be met in order to begin the second course. To determine whether or not a course has a prerequisite, see the course descriptions in the chapter of the faculty or school offering the course.

Normally, a minimum grade of "C" is required in all courses listed as prerequisites, except as otherwise noted in the course descriptions.

For some courses, the prerequisite may be completed before registering for the second course or may be taken concurrently with the second course. To determine if a course may be taken concurrently, see the course descriptions in the chapter of the faculty or school offering the course.

Co-requisite: If a first course is a co-requisite for a second course, the first course **must** be completed in the same term as the second course. To determine if a course has a co-requisite, see the course descriptions in the chapter of the faculty or school offering the course.

Course Numbers

First Two to Four Characters

The two, three or four characters in every course number are a shortened version of the subject of the course.

Last Four Digits

At the University of Manitoba the last four digits of the course number reflect the level of contact with the subject.

For example:
ECON 1210

ECON is the code for Economics.

1210 indicates that it is an introductory or entry level course.

If the course requires a laboratory, this will be shown following the credit hours immediately following the title.
For example:
BIOL 3242 (lab required)

The 2000, 3000, 4000 course numbers indicate the second, third, and fourth levels of university contact with a subject.

Numbers in the 5000 range are normally associated with pre-Master's work or courses in the Post Baccalaureate Diploma and the Post-Graduate Medical Education programs.

Courses numbered 6000-8000 are graduate courses of the Faculty of Graduate Studies.

Course numbers in the 9000 series are used to identify courses taken at the University of Winnipeg by students in the University of Manitoba/University of Winnipeg Joint Master's Programs. The 9000 numbers do not indicate the level of the course taken (see *Graduate Calendar* or *University of Winnipeg Calendar*).

In most cases, some correlation exists between the course number and a student's year of study; that is, students in the third year of a program will generally carry course loads comprised primarily of 3000-level courses.

Other course numbering information

Courses with numbers that end in 0 or an even number are taught in English, most of which are offered on the Fort Garry or Bannatyne campuses or through Distance and Online Education.

Courses with numbers that end in odd numbers are taught in French at Université de Saint-Boniface (https://ustboniface.ca/).

Grades and Grade Point Average Calculation

Introduction

Final grades in most courses are expressed as letters, ranging from F, to A+ the highest. A grade of D is the lowest passing grade, however the minimum grade required to use a course as credit toward a degree or diploma program may be set higher by a faculty or school. Refer to faculty and school regulations. Each letter grade has an assigned numerical value which is used to calculate grade point averages. Grading scales used to determine the final letter grade may vary between courses and programs.

Some courses are graded on a pass/fail basis and because no numerical value is assigned to these courses, they do not affect grade point averages. Courses graded in this way are clearly identified in course descriptions and program outlines.

The Letter Grade System

Letter Grade	Grade Point Value	Description
A+	4.5	Exceptional
A	4.0	Excellent
B+	3.5	Very Good
B	3.0	Good
C+	2.5	Satisfactory
C	2.0	Adequate
D	1.0	Marginal
F	0	Failure
P		Pass
S		Standing

The grade of "D" is regarded as marginal in most courses by all faculties and schools. It contributes to decreasing a term, degree or cumulative Grade Point Average to less than 2.0. Courses graded "D" may be repeated for the purpose of improving a GPA. Note that some faculties and schools consider a grade of "D" as unacceptable and will not apply the course toward the program as credit. In most cases the course will need to be repeated to attain the acceptable grade. Refer to faculty and school regulations.

Calculation of Grade Point Average

The University of Manitoba will report cumulative and term grade point averages for all students through Aurora Student.
Please also refer to the Grade Point Averages Policy (https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/grade-point-averages-policy/) found in the University Policies and Procedures..

Quality Points

The quality points for a course are the product of the credit hours for the course and the grade point obtained by the student; e.g., 3 credit hours with a grade of "B" (3.0 points) = 3 credit hours x 3.0 = 9.0 quality points.

Quality Point Total

The quality point total is the sum of quality points accumulated as students proceed through their program of studies.

Grade Point Average (GPA)

The grade point average (GPA) is the quality point total divided by the total number of credit hours.

Example:

Course	Credit Hours	Grade	Grade Points	Quality Points
Course 1	3	B	3	9
Course 2	3	B+	3.5	10.5
Course 3	3	C+	2.5	7.5
Course 4	3	B	3	9
Course 5	3	A	4	12
Totals	15			48

Grade point average: 240 Quality Points / 15 Credit Hours = 3.20

Poor Grades and Program Progression

A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Students in doubt as to the status of their record should consult an advisor in their faculty or school.

For minimum grade levels, especially as they affect progression requirements, see the faculty or school regulations in the *Academic Calendar* or consult an advisor.

Academic Honours

Students qualify for the Honour List (Dean's, Director's, University 1) when they achieve qualifying grade point averages, as specified by the faculty/school or program regulations.

In addition, outstanding academic achievement will qualify students for other honours and awards. These include:

- the University Gold Medal, which is awarded at graduation in each faculty or school to the student with the most outstanding academic record;
- program medals, which are awarded by faculties and schools to the best student graduating from a specific program;
- graduation "with distinction", which is recorded on the transcripts of all students who attain a qualifying grade point average;
- and other medals and prizes that are specific to programs or disciplines.

Academic Evaluation

Methods of Evaluation

Students shall be informed of the method of evaluation to be used in each course, as specified in the *Responsibilities of Academic Staff with Regard to Students* Policy (https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/responsibilities-academic-staff-regard-students-policy/), found in the University Policies and Procedures.

In departments where a course is offered in more than one section, the department offering the course endeavours to provide instruction so that all sections cover similar topics and that all students achieve a similar level of competency in the topic. However, there will be differences in evaluation as well as in teaching style, readings and assignments from one section to another. Students may contact the department for additional information before registration.

Credit for Term Work

In subjects involving written examinations, laboratories, and term assignments, a student may be required to pass each component

separately. If no final examination is scheduled in a course, the student's final grade will be determined on the basis of the method of evaluation as announced in the first week of lectures.

If credit is not given for term work, the student's final grade will be determined entirely by the results of the final written examination. Where the final grade is determined from the results of both term work and final examinations, the method of computing the final grade will be as announced within the first week of classes. Should a student write a deferred examination, term grades earned will normally be taken into account as set out in the immediately preceding paragraph.

Repeating a Course

A course in which a "D" standing is obtained may need to be repeated by probationary students in certain faculties or where a minimum grade of "C" is required in a prerequisite subject or to meet degree requirements.

Elective courses graded "F" may either be repeated or another elective substituted. All electives in a program must be approved by the faculty or school.

Probation and Academic Suspension

Failure to meet minimum levels of performance as specified in the regulations of the faculty or school will result in a student being placed either on probation or academic suspension in accordance with the faculty or school regulations.

A student's status is determined, following final examinations, at the end of each term (Fall, Winter or Summer terms) or at the end of an academic session as specified in faculty regulations. A student placed on probation is advised to discuss his/her program prior to the next registration with a representative of the dean or director to determine which courses, if any, should be repeated.

A student placed on academic suspension will normally be permitted to apply for re-entry to the faculty or school after one year has elapsed, but reinstatement is not automatic and individual faculty or school regulations must always be consulted.

While on suspension, students are not normally admissible to another faculty or school.

Other Forms of Earning Degree Credit

Letter of Permission for Transfer of Credit

Students in degree programs at this university may take courses at other recognized colleges or universities for transfer of credit provided such courses are approved at least one month prior to the commencement of classes at the other institution by the faculty or school in which they are currently registered. The approval is subject to individual faculty/school regulations and is granted in the form of a Letter of Permission. The student must obtain a Letter of Permission whether or not the course/s being taken are for transfer of credit to the University of Manitoba. Failure to obtain a Letter of Permission may have serious academic implications.

To obtain a Letter of Permission (https://umanitoba.ca/registrar/letter-permission/), application must be made to the Registrar's Office as early as possible and at least one month prior to when required at the other institution.

Each application must be accompanied by the appropriate fee. The fees are for each application and a separate application is required for each session and institution regardless of the number of courses being considered. Students planning to seek permission to take courses elsewhere for transfer of credit to the University of Manitoba are cautioned to check the current Academic Calendar for the residence and degree requirements of the degree programs in which they are enrolled.

Transferred courses will be given assigned credit hour values and grades. The transferred grade will be included in the student's degree and cumulative GPA.

Challenge for Credit

The purpose of Challenge for Credit is to provide students of the university with some means of obtaining academic credit in University of Manitoba courses (not otherwise obtainable as a transfer of credit from other institutions) for practical training and experience, or reading and study previously completed. Students who have registered to challenge would normally not attend classes or laboratories. Courses which have previously been taken at the University of Manitoba may not be challenged for credit.

To be eligible to challenge for credit a student must first be admitted to a faculty or school of the University of Manitoba. Eligible students will be required to demonstrate their competence in the courses which they are challenging for credit. Where formal, written examinations are required, these will be generally scheduled during the regular examination sessions in April/May, June, August, or December.

For information regarding requirements, procedures, applications and fees a student should contact the office of the faculty or school in which the student is enrolled, or in the case of new students, the faculty or school to which the new student has been admitted.

Application of Course Credit when transferring between Programs within the University of Manitoba

When students transfer into program from another faculty or school within the University of Manitoba, some course credits previously earned may be applied to the new program. The credit hour value assigned by the faculty or school that offers the course is used. That is, there can only be one credit weight designated for a course with a particular course number.

Academic Appeals

With the exception of decisions on admissions or disciplinary matters, all academic appeals from decisions of faculty or school appeals committees at the University of Manitoba or by the Comiteé d'appels at Université de Saint-Boniface shall be heard by the Senate Appeals Committee regardless of the institute of registration of the student concerned.

The complete terms of reference for the Senate Committee on Appeals as well as an Appeal Form may be obtained from the Office of the University Secretary, 312 Administration Building or Student Advocacy/Student Resource Services, 519 University Centre.

Academic Integrity

The University of Manitoba takes academic integrity seriously. As a member of the International Centre for Academic Integrity, the University defines academic integrity as a commitment to six fundamental values: honesty, trust, fairness, respect, responsibility and courage. (International Centre for Academic Integrity, 2014)

To help students understand the expectations of the University of Manitoba, definitions for the types of prohibited behaviours are in the Student Academic Misconduct Procedure (https://

catalog.umanitoba.ca/undergraduate-studies/policies-procedures/student-discipline-bylaw/) and provided below.

"Academic Misconduct" means any conduct that has, or might reasonably be seen to have, an adverse effect on the academic integrity of the University, including but not limited to:

(a) Plagiarism – the presentation or use of information, ideas, images, sentences, findings, etc. as one's own without appropriate attribution in a written assignment, test or final examination.

(b) Cheating on Quizzes, Tests, or Final Examinations – the circumventing of fair testing procedures or contravention of exam regulations. Such acts may be premeditated/planned or may be unintentional or opportunistic.

(c) Inappropriate Collaboration – when a student and any other person work together on assignments, projects, tests, labs or other work unless authorized by the course instructor.

(d) Duplicate Submission – cheating where a student submits a paper/assignment/test in full or in part, for more than one course without the permission of the course instructor.

(e) Personation – writing an assignment, lab, test, or examination for another student, or the unauthorized use of another person's signature or identification in order to impersonate someone else. Personation includes both the personator and the person initiating the personation.

(f) Academic Fraud – falsification of data or official documents as well as the falsification of medical or compassionate circumstances/documentation to gain accommodations to complete assignments, tests or examinations.

Note that the above applies to written, visual, and spatial assignments as well as oral presentations.

Over the course of your university studies, you may find yourself in situations that can make the application of these definitions unclear. The University of Manitoba wants to help you be successful, and this includes providing you with the knowledge and tools to support your decisions to act with integrity. There are a number of people and places on campus that will help you understand the rules and how they apply to your academic work. If you have questions or are uncertain about what is expected of you in your courses, you have several options:

- Ask your professor, instructor, or teaching assistant for assistance or clarification.
- Get support from the Academic Learning Centre (https://catalog.umanitoba.ca/facilities-services-resources/academic-learning-centre/) or Libraries (https://catalog.umanitoba.ca/facilities-services-resources/libraries/):
- Visit the Academic Integrity site (https://catalog.umanitoba.ca/facilities-services-resources/academic-integrity/) for information and tools to help you understand academic integrity.
- Make an appointment with the Student Advocacy (https://catalog.umanitoba.ca/facilities-services-resources/student-advocacy/) office. This office assists students to understand their rights and responsibilities and provides support to students who have received an allegation of academic misconduct.

Appeals of Grades

Appeal of Term Work

Students may formally appeal a grade received for term work provided that the matter has been discussed with the instructor in the first instance in an attempt to resolve the issue without the need of formal appeal. Term work grades normally may be appealed up to ten (10) working days after the grades for the term work have been made available to the student.

The fee which is charged for each appealed term work grade will be refunded for any grade which is changed as a result of the appeal.

Appeal of Final Grades

Final grades are not released to students who are on "Hold Status"; the deadline for appeal of assigned grades will not be extended for students who were unable to access their final grades due to a hold.

These regulations expand on the Final Grades Procedures *(*https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/final-examinations-grades-policy/*)found in the University Policies and Procedures.*

Attendance and Withdrawal

Attendance at Class and Debarment

Regular attendance is expected of all students in all courses.

An instructor may initiate procedures to debar a student from attending classes and from final examinations and/or from receiving credit where unexcused absences exceed those permitted by the faculty or school regulations.

A student may be debarred from class, laboratories, and examinations by action of the dean/director for persistent non-attendance, failure to produce assignments to the satisfaction of the instructor, and/or unsafe clinical practice or practicum. Students so debarred will have failed that course.

Withdrawal from Courses and Programs

Voluntary Withdrawal

The registration revision period extends two weeks from the first day of classes in both Fall and Winter terms. Courses dropped during this period shall not be regarded as withdrawals and shall not be recorded on official transcripts or student histories. The revision period is prorated for Summer terms and for parts of term.

After the registration revision period ends, voluntary withdrawals (VWs) will be recorded on official transcripts and student histories.

The following dates are deadlines for voluntary withdrawals:

- The Voluntary Withdrawal deadline shall be the 48th teaching day in both Fall and Winter term for those half-courses taught over the whole of each term;
- The Voluntary Withdrawal deadline for full-courses taught over both Fall and Winter term shall be the 48th teaching day of the Winter term; and
- The Voluntary Withdrawal deadline for full-and-half courses taught during Summer terms or during some other special schedule shall be calculated in a similar manner using a pro-rated number of teaching days.

The exact Voluntary Withdrawal dates that apply to courses offered in the current academic session are published in the Academic Schedule (https://catalog.umanitoba.ca/undergraduate-studies/academic-schedule/).

Authorized Withdrawal

Subject to the provision of satisfactory documentation to the faculty of registration, Authorized Withdrawals (AWs) may be permitted on medical or compassionate grounds.

Required Withdrawal from Professional Programs

Senate, at the request of some faculties and schools, has approved bylaws granting them the authority to require a student to withdraw on the basis of unsuitability for the practice of the profession to which the program of study leads.

This right may be exercised at any time throughout the academic year or following the results of examinations at the end of every year.

This right to require a student to withdraw prevails notwithstanding any other provisions in the academic regulations of the particular faculty or school regarding eligibility to proceed or repeat.

Where Senate has approved such a bylaw, that fact is indicated in the *Academic Calendar* chapter for that faculty or school. A copy of the professional unsuitability bylaw may be obtained from the general office of the faculty or school.

Deferred and Supplemental Examinations

These regulations expand on the Deferred and Supplemental Examinations Procedures (https://umanitoba.ca/admin/governance/governing_documents/academic/1299.html) *found in the University Policies and Procedures.*

Accepting Standing in Course without Examination

In the event that a student is unable to write a deferred examination as it has been scheduled, a grade may be assigned without examination (please refer to the Deferred and Supplemental Examinations Procedures) (https://catalog.umanitoba.ca/undergraduate-studies/policies-procedures/final-examinations-grades-policy/). A student who accepts standing in a course without examination may not, at a later date, request permission to write a deferred examination in the course.

Supplemental Examinations

Supplemental Examinations are offered by some faculties to students who have not achieved the minimum result in required courses.

Students who are granted supplemental privileges are normally required to sit the examination within thirty (30) working days from the end of the examination series in which the supplemental grade was received, unless the progression rules of a faculty or school require the successful completion of an entire academic year before a student is eligible to proceed into the next. In this case, students are obliged to sit the examination at the next ensuing examination period.

Final Examinations

These regulations expand on the Final Examinations and Final Grades Policy and Procedures found in the University Policies and Procedures.

General Examination Regulations

Students (with the exception of students auditing courses) are required to write all final examinations. Those who absent themselves without an acceptable reason will receive a grade classification of "NP" (No Paper) accompanied by a letter grade based on term work completed, using a zero value for incomplete term work and for the final examination. If no credit for term work is involved, a grade of "F" will be assigned. Under certain conditions a student may apply for a deferred examination; see Deferred and Supplemental Examinations.

Examination Schedules

For most faculties, schools and colleges, final examinations are normally conducted in December for Fall Term courses; in April/May for Winter Term and Fall/Winter Term spanned courses; and in August for Distance and Online Education Summer Term courses. Exact dates for the exam period can be found in the Academic Schedule (https://catalog.umanitoba.ca/undergraduate-studies/academic-schedule/).

The Schedule of Final Exams for Fall and Winter is made available by the Registrar's Office approximately one month after the beginning of the term. This schedule is made available on the Registrar's Office Website (https://umanitoba.ca/registrar/final-exams/) and includes finalized dates and times for each exam. Exam locations are added to the schedule at a later date. Summer Term courses, final exam details will be made available at the time of registration.

Students must remain available until all examination and test obligations have been fulfilled. Travel plans are not an acceptable reason for missing an exam.

Examination Personations

A student who arranges for another individual to undertake or write any nature of examination for and on his/her behalf, as well as the individual who undertakes or writes the examination, will be subject to discipline under the university's Student Discipline Bylaw, which could lead to suspension or expulsion from the university. In addition, the Canadian Criminal Code treats the personation of a candidate at a competitive or qualifying examination held at a university as an offence punishable by summary conviction.

Hold Status

More details about being on Hold can be found online on the Registrar's Office website *(https://umanitoba.ca/registrar/hold-status/).*

Students will be placed on "Hold Status" if they incur any type of outstanding obligation (either financial or otherwise) to the university or its associated faculties, schools, colleges or administrative units.

Some typical reasons for holds are:

- Program/course selection must be approved
- U1 student must transit into the Faculty of Arts or Science
- Required Major, Minor and/or Concentration declaration
- Transcripts or documents required from other institutions
- Unpaid tuition and/or other university fees
- Outstanding library books and/or fines
- Parking fines
- Pending disciplinary action

Depending on the reason for the hold, limited or no administrative or academic services will be provided to students on Hold Status until the specific obligations have been met.

Students must clear their holds prior to registration by contacting the appropriate office. Students with outstanding financial obligations to the

university will not be permitted to register again until the hold has been cleared or permission to register has been obtained from the Office of the Vice-President (Administration).

Advisor and Program Holds

Students enroled in some programs are required to discuss their course selections and program status with an advisor prior to registration. Advisor and Program Holds normally only restrict registration activity; other administrative services remain available.

Students can verify whether their program requires consultation with an advisor by checking their faculty/school section of the Academic Calendar, or by viewing their Registration Time and Status in Aurora.

Graduation and Convocation

Graduation

Students may graduate from the University of Manitoba in May/June, October, and February of each year. (Convocation ceremonies are held in May/June and October only).

Students are eligible to graduate when they have completed all of the requirements for their degree program in accordance with the regulations described in the chapter General Academic Regulations (https://catalog.umanitoba.ca/undergraduate-studies/general-academic-regulations/) and the regulations available from the general offices of their faculties and schools.

It is the responsibility of each student to be familiar with the graduation requirements of the program in which they are enrolled. Consultation with academic advisors is advised to ensure that graduation requirements are met.

Please refer to the Registrar's Office website (https://umanitoba.ca/registrar/graduation-convocation/FAQ/) for Frequently asked Questions about Graduation and Convocation.

Application for Graduation

Every candidate for a degree, diploma or certificate must make formal application at the beginning of the session in which he/she expects to complete graduation requirements.

Application is to be made through Aurora Student. (Log into Aurora Student; click Enrolment and Academic Records, then Declarations, then Declare Graduation Date.)

Changing a Graduation Date

If you need to change your graduation date after you have made your declaration, you must contact the general office of your faculty, college, or school as soon as possible.

Receipt of Information about Graduation

After you have declared your graduation, you will be sent a series of e-mails to your University e-mail account, requesting you to verify your full legal name, asking you about your attendance at convocation, providing convocation information, and so on. **It is imperative that you activate your University of Manitoba email account and check it regularly**.

Convocation

Convocation ceremonies are held in May/June and October of each year.

February graduates are invited to attend the May/June ceremonies.

Graduating students are encouraged to attend with their families and friends because it is the one ceremonial occasion that marks the successful conclusion of their program of studies.

Graduates who wish to attend Convocation, verify their attendance at the Convocation ceremony by reserving their academic attire through the University approved supplier.

Students who, for any reason, do not attend Convocation will receive their degrees in absentia.

The Registrar's Office will hold unclaimed parchments for a maximum of twelve months after graduation when any unclaimed parchments will be destroyed. These will include those not given at Convocation, those that were to be picked up in person but not claimed, those that were mailed but returned to the Registrar's Office by the postal outlet or courier depot, those that were not issued due to a financial hold on a student's records, and those that were reprinted immediately after convocation due to corrections.

It is critical that you update your address, phone number and email through Aurora whenever changes occur. Note that any changes made with the Alumni Association are not reflected in your University of Manitoba student records.

If you do not receive your parchment, it is your responsibility to follow up with the Registrar's Office within a twelve-month period. Any requests for parchments after this time will be processed as replacements; there is a fee charged for replacement parchments.

Academic Dress

Students are responsible for making arrangements to reserve their academic attire through the University approved supplier. Rental fees apply. Details will be provided via e-mail once Convocation planning begins.

Convocation Information

Information on Convocation may be found on the Graduation/Convocation website (http://umanitoba.ca/convocation/).

Personal Information

Mailing Address

In order to receive University mail, it is essential that you to provide the Registrar's Office with your current address. All mail will be directed to the address you provide. You may change your mailing address and phone number by accessing Aurora Student and then selecting Personal Information.

Change of Name

If you have changed your name since you were first admitted or if the name on your record is incomplete or inaccurate, official evidence of the name change or correction must be submitted to the Registrar's Office along with a completed Request for Change of Name form (https://umanitoba.ca/registrar/change-your-personal-information/). The University of Manitoba uses your **full legal name** on its records, transcripts, and graduation documents (a full legal name, for example, includes all names on your birth certificate - first, middle, and last - or on your study permit). Abbreviated names, Anglicized names, or initials should not be used unless they have been proven with appropriate documentation.

Admissions

Dean: Dr. Kelley Main
Associate Dean(s): Dr. Todd Duhamel, Dr. Stephen Kirkland, Dr. Dawn Sutherland
Campus Address/General Office: 500 University Centre
Telephone: (204) 474 9377
Fax: (204) 474 7553
Email Address: graduate.studies@umanitoba.ca (Graduate.Studies@umanitoba.ca)
Website: umanitoba.ca/graduate-studies/ (https://umanitoba.ca/graduate-studies/)

Preface (Grad Admissions)

At the University of Manitoba, graduate study and research were conducted on a modest scale from the foundation of the university and during its early years. In 1949, a Faculty of Graduate Studies and Research was established to systematize efforts in these fields. A substantial number of graduate students received fellowships, scholarships, or assistantships made available under such arrangements as the Natural Sciences and Engineering Research Council, and the university itself. Providing additional opportunity for graduate students, research work funded through grants from business corporations and government bodies is now conducted at the university.

Agriculture and Agrifood Canada and the Department of Fisheries and Oceans maintain research initiatives on the Fort Garry campus. Additional and extensive research facilities are available in the faculties of Dentistry and Medicine located in central Winnipeg and the university's Bannatyne Campus. The Faculty of Medicine operates in close conjunction with the major teaching hospitals.

Graduate work at the doctoral level is offered in the faculties of Agricultural and Food Sciences, Arts, Clayton H. Ridell Faculty of Environment, Earth and Resources, Dentistry, Education, Engineering, Medicine, Science, Social Work, and the Asper School of Business/ Faculty of Management.

The Faculty of Graduate Studies is governed by the Faculty Council of Graduate Studies. The Faculty Council delegates powers to the Executive Committee of Graduate Studies which in turn delegates responsibilities to standing committees of the faculty, such as the Guidelines and Policy Committee and the Awards Committee.

Admission to Graduate Studies

Degrees and Diplomas Offered

The Faculty of Graduate Studies offers advanced courses of instruction and facilities for research leading to the following:

- Master of Applied Human Nutrition (M.A.H.N.)
- Master of Architecture (M.Arch.)
- Master of Arts (M.A.)
- Maîtrise ès Arts (Université de Saint-Boniface)
- Master of Business Administration (M.B.A.)
- Master of City Planning (M.C.P.)
- Master of Dentistry (M.Dent.)
- Master of Education (M.Ed.)
- Maîtrise en Éducation (Université de Saint-Boniface)
- Master of Engineering (M.Eng.)
- Master of Environment (M.Env.)
- Master of Finance (M.Fin.)
- Master of Fine Art (M.F.A.)
- Master of Human Rights (M.H.R.)
- Master of Interior Design (M.I.D.)
- Master of Landscape Architecture (M.L.Arch.)
- Master of Laws (LL.M.)
- Master of Music (M.Mus)
- Master of Natural Resources Management (M.N.R.M.)
- Master of Nursing (M.N.)
- Master of Occupational Therapy (M.O.T.)
- Master of Physical Therapy (M.P.T.)
- Master of Physician Assistant Studies (M.P.A.S.)
- Master of Public Administration (M.P.A.)
- Master of Public Health (M.P.H.)
- Master of Science (M.Sc.)
- Master of Social Work (M.S.W.)
- Master of Supply Chain Management and Logistics (M.S.C.M.)
- Doctor of Philosophy (Ph.D.)
- Diploma in Population Health (Dip.P.H.)*
- Micro-Diploma in Science Communication

*Currently on hold.

See the Graduate Studies Program index in this Calendar for listings of graduate programs by unit.

Admission

General Policy on Admission

The general policy on admission to the Faculty of Graduate Studies is found in the Academic Guide section of this Calendar. Note that admission standards as well as criteria and procedures for admission may vary from program to program. Consult the specific departmental listing in this Calendar for details.

Admission to the Faculty of Graduate Studies is competitive and a combination of factors is considered in the admission decision, including:

- The past academic performance of the applicant and assessments of referees. These are used as indicators of the likelihood that the applicant can successfully complete the course of studies and research for the degree.
- The capacity of the department (unit, faculty, institute, etc.) to provide the program of study and research requested by the applicant, including adequate study and research facilities.

The availability and willingness of a faculty member competent to supervise the program of study and research of the applicant.

Application

APPLICATION FORMS

See the Graduate Studies website (https://umanitoba.ca/graduate-studies/graduate-student-admissions/) for application information. For application deadline dates and program-specific requirements, refer to the specific graduate program of study page (https://umanitoba.ca/explore/programs-of-study/graduate/). Application to live in residence is made separately (Please refer to Homestay (https://umanitoba.ca/english-language-centre/homestay-accommodations/) or Student Residences (https://umanitoba.ca/housing/))

Application Fee

This fee must accompany all online admission applications:

- Canadian/permanent residents - $100. (CAD)
- International applicants - $100. (CAD)

Application Declaration

All persons seeking admission to the University of Manitoba must sign the following as part of the declaration on the Application for Admission: "I hereby certify that I have read and understood the instructions and information sheet attached to this application form and that all statements made in conjunction with this application are true and complete. I understand that my application will be rejected if I have not disclosed my complete academic record or have submitted false information in support of my application to the Faculty of Graduate studies. In such an event I understand that future applications from me will not be considered."

Application Fraud or Misconduct

It should be noted that the commission of application fraud or misconduct may result in acceptance and registration being withdrawn and the applicant disqualified from consideration, not only in the year of application, but, in all subsequent sessions. If discovered in a subsequent session it may result in dismissal from the university. Application fraud or misconduct includes the following:

- Failure to declare attendance at another post-secondary institution;
- Presenting falsified academic documentation or causing or encouraging another person to falsify records through translation or data changes;
- Presenting falsified personal documentation, e.g. using a false name, date of birth, country of origin, etc.;
- Presenting falsified or fictitious reference documentation;
- Cheating on or having another person write a standardized entry exam such as TOEFL, MCAT, LSAT, DAT or GMAT;
- Presenting another person's standardized test score as one's own to falsify a test result; and
- Failure to report suspensions from another post-secondary institution.

Classification of Students

The classification of a student at the University of Manitoba is determined on admission to a program of study.

Please refer to Student Status/Classification of Students. (p. 93)

Academic Guide

The Faculty of Graduate Studies Academic Guide contains all the rules and policies pertaining to the Faculty of Graduate Studies. Adherence to these rules is of utmost importance for the effective functioning/operation of programs and for guiding and monitoring the progress of students. The integrity of the process is at stake. The major goal of this guide is to prevent potential problems that may affect the completion of a student's program. It is the responsibility of students and the department/unit offering a graduate program to read and follow the policies contained herein.

All regulations as laid out in the Faculty of Graduate Studies Academic Guide are subject to revision by the appropriate bodies of the Faculty of Graduate Studies. This compendium is presented as the most recent set of regulations as a guideline for students and staff. Individual departments may have additional regulations that supplement these general regulations. All such supplementary procedures and regulations must be approved as specified by the By-Laws of the Faculty of Graduate Studies, be published and available to students, and kept on file in the Faculty of Graduate Studies Office.

Preface

The Faculty of Graduate Studies is a pan-University faculty responsible for overseeing the administration of all graduate programs at The University of Manitoba. The Faculty of Graduate Studies Academic Guide contains all the rules and policies pertaining to the Faculty of Graduate Studies. These regulations apply to all graduate students in all programs in all academic units. Adherence to these rules is of utmost importance for the effective functioning/operation of programs and for guiding and monitoring the progress of students. It is the responsibility of students, members of the Faculty of Graduate Studies, and the department/unit offering a graduate program to read and follow the policies contained herein.

For those programs that are administered through a Faculty (as opposed to a Department) the term "Department" should be substituted by "Unit" within this document (i.e., Department Head becomes Unit Head.)

Definitions

The "Dean, Faculty of Graduate Studies" shall be taken to mean the Dean, Faculty of Graduate Studies or designate.

"Unit" shall be taken to mean the academic unit where the graduate student is pursuing their studies. Generally, this is the department. For Faculty-based programs, the Dean or Director is the de facto Head of the unit. The term "unit" shall also include School(s) or College(s) of Faculties within the University. The Dean of the Faculty of Graduate Studies is the de facto Head of interdisciplinary programs administered by the Faculty of Graduate Studies. The Head of any unit may designate any of their responsibilities in this policy to another member of the unit (e.g., Graduate Chair). When that designation is made, the Graduate Chair will be the primary contact for the graduate program.

"Master's student" shall be taken to mean an individual pursuing a Master's degree. This individual is considered a student up until successful completion of their Master's degree, after which they are a graduate of the Master's program.

"Ph.D. candidate" or "doctoral candidate" shall be taken to mean an individual who is pursuing a Ph.D. degree and who has successfully completed all required coursework, passed the candidacy examinations, and has an approved thesis proposal. Prior to achieving these milestones, the individual is considered a "Ph.D. student" or "doctoral student."

Application, Admission, and Registration Policies

Application and Admission Procedures

The application (and all required documentation) is to be submitted directly to the Faculty of Graduate Studies via the online application system. **Applicants should contact the department/unit to which they are applying for the procedures and requirements which are specific to the program of application.** Contact information for each department/unit can be found on the Graduate programs of study website (https://umanitoba.ca/explore/programs-of-study/graduate/).

Process

1. A completed official application for admission form must be submitted, together with the application fee and supporting documentation, to the Faculty of Graduate Studies, via the online application system. Applicants are **required** to submit the application and documentation to the Faculty of Graduate Studies in time to meet the application deadline in place for a particular department/unit. Deadlines vary depending on the program to which the applicant is applying and whether the applicant is domestic or international. Deadlines can be found by clicking the appropriate application program page on the Graduate programs of study website (https://umanitoba.ca/explore/programs-of-study/graduate/).
2. Applications are subsequently reviewed by the unit offering the program which will decide whether the applicant meets the unit's criteria including, but not limited to, availability of advisors, space, and facilities. The unit Head will submit their recommended decisions (i.e., acceptance or rejection) to the Faculty of Graduate Studies. The unit should not notify applicants of their recommendations.
3. Applications recommended for admission are checked to determine if they meet the Faculty of Graduate Studies' eligibility requirements. The Faculty of Graduate Studies then notifies applicants of their acceptance or rejection.

Deadlines for Recommended Applications (from Departments/Units to the Faculty of Graduate Studies)

The following are the deadlines for receipt by the Faculty of Graduate Studies of recommendations from departments/units.

Term	Start Date	Canadian/US	International
Fall	September	July 1	April 1
Winter	January	November 1	August 1
Summer	May	March 1	December 1

IMPORTANT: These are not unit-specific application deadlines. Prospective applicants must consult the appropriate application program page on the Graduate programs of study website (https://umanitoba.ca/explore/programs-of-study/graduate/) to determine the unit deadline. Units who would like one application deadline for all applicants should align their dates with the international deadline.

Application Fee

A $100.00 (CDN) non-refundable fee must accompany an application for admission. The Physician Assistant Studies and Orthodontics and Dentofacial Orthopedics programs charge an additional fee of $25 and $50, respectively.

Transcripts

Unofficial copies of transcripts and final degree certificates are acceptable for initial assessment and provisional admission purposes for all attended degree programs. Upon admission to the Faculty of Graduate Studies, applicants must arrange for official transcripts from all post-secondary institutions attended to be sent to the Faculty of Graduate Studies, within one (1) month of the date on the admission letter. Applicants will be placed on hold, which prevents registration until all admission requirements have been submitted. **All transcripts must arrive in sealed, university-stamped envelopes sent directly from the issuing institution(s) and be accompanied by official and literal English translations** (please refer to Transcripts: International below). For international degrees or where the transcripts do or will not clearly state that a degree has been conferred, a copy of the official degree certificate is also required. Applicants who are unable to provide the required official documentation should contact the Faculty of Graduate Studies Admissions Office to identify possible accommodations to address the need for documentation within their specific circumstances.

Transcripts: International

Where academic records from a country other than Canada are produced in a language other than English, the applicant must arrange for the submission of official literal English translations of all records. To be official, original language documents and English translations must arrive together in envelopes which have been sealed and endorsed by the issuing institution. For international degrees, a copy of the official degree certificate is also required.

Transcripts: University of Manitoba

University of Manitoba students are not required to submit University of Manitoba transcripts.

Proficiency in English

The Faculty of Graduate Studies requires a passing, acceptable English Language Test score in order to offer admission. A successfully completed English Language Proficiency Test from the approved list is required of all applicants unless they have received a secondary school diploma and/or university degree from Canada or one of the countries listed on the English Language Proficiency Test Exemption List (https://umanitoba.ca/graduate-studies/graduate-student-admissions/requirements/#countries-exempt-from-english-language-requirements). In all cases, test scores older than two (2) years (from the time of completing the test) are invalid.

Thresholds required for successful completion are indicated in parentheses.

- Test of English as a Foreign Language (TOEFL) Internet based - iBT® (86; minimum score of 20 in each of reading, writing, listening and speaking categories). The "best score" will not be considered for admission. Only individual test scores will be used to meet the minimum requirements.
- International English Language Testing System (IELTS™) (6.5 in the Academic Module)
- Intensive Academic English Program (IAEP) (Pass Level 5/AEPUCE with a minimum of 65% overall)
- PTE Academic (61% overall)

Note:
Some units may require a specific test or test scores greater than those indicated above. Students should check department/unit supplementary regulations for details.

English Language Proficiency Test Exemption List

Applicants holding secondary school diplomas and/or recognized university degrees from countries on the Faculty of Graduate Studies English Language exemption list are not required to submit an English Language Proficiency score. For more information please see our website (https://umanitoba.ca/graduate-studies/graduate-student-admissions/requirements/#countries-exempt-from-english-language-requirements).

Letters of Recommendation

Letters of Recommendation are to be completed via the online application system. Recommendation letters submitted via post or email are not accepted. Applicants are required to add their Recommendation

Provider(s)' contact information so that each recommender is sent an automated email notification.

Generally, two (2) Letters of Recommendation must be submitted to the Faculty of Graduate Studies. The number of required recommendation letters for an application for admission is stated on the program's webpage which is available at this link (https://umanitoba.ca/explore/programs-of-study/graduate/). Units may have different requirements on the number of and content required in recommendation letters.

Admission Tests

Some departments/units require admissions tests, such as the Graduate Record Examination (GRE®) or the Graduate Management Aptitude Test (GMAT™). These requirements are listed in the department/unit's supplementary regulations. If required, the scores must be submitted at the time of application.

Entrance Requirements

The minimum standard for acceptance into any category in the Faculty of Graduate Studies is a 3.0 Grade Point Average (GPA) (or equivalent) out of 4.5 in the last two (2) years of full-time university study or last 60 credit hours. (GPA equivalency information is available on the Graduate Studies website (https://umanitoba.ca/graduate-studies/graduate-student-admissions/requirements/#how-to-calculate-canadian-and-us-gpas).)

Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

Eligibility of University of Manitoba Staff Members

A member of the academic staff at The University of Manitoba with faculty rank is not eligible to apply for admission to a graduate program in the department/unit in which the appointment is held.

Registration Procedures

Undergraduate Student Registration in Graduate Level Courses

Undergraduate students may be permitted to register in 7000-level courses or above on recommendation of the department/unit offering the graduate course, subject to the conditions listed below.

- Undergraduate students must obtain permission from the Department/Unit Head and course instructor before registering for a graduate course.
- Only undergraduate students completing an undergraduate degree at the University of Manitoba are eligible to enroll in a graduate course (i.e., undergraduate students from other institutions and those completing courses without registration in a degree program are ineligible for registration in graduate courses).
- Undergraduate students are not eligible for enrollment in any graduate course that is cross-listed with an undergraduate course, or that is scheduled to be taught at the same time and location as an undergraduate class.
- Undergraduate students will only be eligible to receive graduate-level credit for a course designated as 7000-level or above if at least 75% of the students registered in the course are graduate students at the outset of the term.
- Undergraduate students who complete a graduate course are not guaranteed admission to a graduate program.

Initial Program Registration

On admission to a graduate program at the University of Manitoba, students may submit a formal request to the Faculty of Graduate Studies to apply any previously completed graduate courses toward their graduate program requirements, subject to the restrictions listed below.

- No more than 50% of the coursework required in a graduate program may be imported from credit hours completed during an undergraduate program.
- Only courses in which a C+ grade or higher, or the minimum grade required by the program to which the course would be applied, are eligible to be considered towards meeting the requirements of any graduate program.
- Any graduate course completed by an undergraduate student may subsequently be applied to a graduate program only if it has not been used toward completion of any other degree program.
- Any graduate course completed by an undergraduate student for which a passing grade has been obtained (i.e., C+ or higher) may not be repeated should the student later gain admission to a graduate program.
- Courses completed more than seven (7) years prior to the date of awarding a degree may not usually be used for credit towards the degree (please refer to Lapse or Expiration of Credit of Courses (p. 103)).

All graduate students must initially register in the term indicated in their letter of acceptance as specified in the Academic Schedule of the Graduate Calendar. Any student not registering by the registration deadline for the term specified in their letter of offer will be required to re-apply for admission; admission is not guaranteed if a student re-applies to the Faculty of Graduate Studies. In exceptional circumstances and with prior approval from the department/unit, students may defer registration for up to one (1) year following acceptance into the Faculty of Graduate Studies.

A student's program of study must be approved by the Head of the major department/unit or designate. Approval to take courses from departments/units outside the major department/unit must be obtained from the outside department/unit.

A student may apply for admission/registration to two (2) concurrent programs. However, the approval or denial of admission and registration to two (2) concurrent programs rests with the Dean of the Faculty of Graduate Studies in consultation with the department(s)/unit(s) concerned. The request for registration to two (2) concurrent programs must be submitted to the Faculty of Graduate Studies on the "Concurrent Curriculum Permission (https://umanitoba.ca/graduate-studies/forms/)" form prior to the student's initial registration in the secondary program.

Where a student does register in two (2) concurrent programs, it is important to note that dual registration may affect funding eligibility for The University of Manitoba Graduate Fellowship (UMGF) and may limit other funding possibilities.

Re-Registration

All students must re-register in all Fall, Winter and Summer terms of their program until a student is eligible to graduate, unless they are granted an official leave of absence that does not require registration (see Leaves of Absence (https://catalog.umanitoba.ca/graduate-studies/academic-guide/leaves-absence/)). Failure to re-register while in good academic standing will result in the student being discontinued from their graduate program and the notation 'Discontinued Graduate Program'

placed on their academic record. Failure to re-register while not in good academic standing* will result in the student being withdrawn and the notation 'Required to Withdraw' placed on their academic record. A student who has been discontinued and would like to be considered for continuation in a program must apply for re-admission via an online admission process. Applications received by the registration revision deadline will be processed for the upcoming term. Re-admission is not guaranteed.

*Good academic standing includes, but is not limited to, the regulations contained in sections Academic Performance and Performance Related to Coursework without exceeding the time permitted to complete a program.

The re-registration requirement does not apply to occasional students, visiting students, Pre-Master's students or students on an Exceptional or Parental Leave of Absence (please refer to "Leave of Absence (https://catalog.umanitoba.ca/graduate-studies/academic-guide/leaves-absence/)").

Registration Revisions

Revisions to registration must be approved by the Department/Unit Head or designate and may be made during the designated periods as published in the Academic Schedule (p. 11) of the Graduate Academic Calendar.

Note: Graduate students are not permitted to withdraw from courses without written permission from their Department/Unit Head or designate on recommendation from their advisor/co-advisor (and/or advisory committee). The notation "Required to Withdraw" may be placed on the academic record of any graduate student who has withdrawn from courses without such approval.

Advisor Student Guidelines (ASG)

All students in thesis/practicum programs, together with their advisor/co-advisor, are required to discuss and complete the Advisor-Student Guidelines electronically as soon as possible after initial registration, prior to the commencement of any research, and no later than at the time of submission of the first Progress Report. The advisor, co-advisor (if applicable), and the student are all required to approve the agreement. If the parties cannot agree on one or more component(s) of the Advisor Student Guidelines, the matter should be referred to the Department/Unit Head, Graduate Chair, or the Dean of the Faculty of Graduate Studies. If a student does not have an advisor/co-advisor at this time, the interim advisor* will be required to complete the ASG. A new ASG is to be completed if there is a change in advisor/co-advisor, a co-advisor is added mid-way through the student's program, or if a student changes programs. Students must have an advisor through to the end of their program in programs requiring an advisor.

Should, during the student's program, the relationship between the student and advisor/co-advisor significantly deteriorate, the matter should be referred sequentially to the Department/Unit Graduate Chair, the Department/Unit Head, then to the Associate Dean working with the department/unit in the Faculty of Graduate Studies and finally the Dean of the Faculty of Graduate Studies. Students can also seek support from other offices including Student Advocacy and the Student Counselling Centre.

It is the responsibility of the department/unit offering the program in which the student is studying to arrange an alternate advisor/co-advisor if this is appropriate and necessary. Departments/Units who have difficulty finding an alternate advisor need to consult with the Associate Dean working with the department/unit in the Faculty of Graduate Studies for support to pursue all reasonable options given the theoretical and research expertise required of an advisor in relation to the thesis/practicum. If an advisor cannot be secured within one term, the student cannot remain in their program.

*In departments/units where the choice of thesis/practicum topic and thesis/practicum advisor are postponed after a student's entry into the program, the Department/Unit Head, within one (1) term, shall appoint a faculty member to advise the student in the interim period before the regular advisor is assigned or chosen.

Western Deans' Agreement

This agreement was established in 1974 as an expression of co-operation and mutual support among universities offering graduate programs in western Canada. Its primary purpose is the reciprocal enrichment of graduate programs throughout western Canada. This agreement is not intended to preclude other agreements between participating institutions. A list of the participating Universities can be found on the Western Canadian Deans of Graduate Studies website (http://wcdgs.ca/). University of Manitoba graduate students interested in participating can learn more about how to apply on the Registrar's Office (https://umanitoba.ca/registrar/letter-permission/) website.

The Western Deans' Agreement usually provides an automatic tuition fee waiver for visiting students. Graduate students paying normal required tuition fees to their home institution will not pay tuition fees to the host institution.

Only degree level courses from recognized post-secondary institutions will be considered; courses that are part of certificate or diploma programs will not be approved.

Program fees are always to be paid to the home institution, regardless of coursework taken at another institution. Students may be required to pay student, activity, application, or other ancillary fees to the host institution, according to general policies in effect at the host institution. Wherever possible, these fees will also be waived.

Students will qualify for the fee waiver if they:

1. Present the "Authorization Form: Western Deans' Agreement (http://wcdgs.ca/content/dam/ex/wcdgs/Western-Deans-Agreement.pdf)" signed by the University of Manitoba graduate student's Department/Unit Head or advisor/co-advisor to the Faculty of Graduate Studies at least eight (8) weeks prior to the start of the term of the course(s) at the host institution. The Dean of the Faculty of Graduate Studies (or designate) will review and sign the form and submit it to the participating Western Deans' institution at least six (6) weeks prior to the start of the term, specifying the course(s) to be taken for credit toward a graduate degree program at the student's home institution;
2. Are in good standing in a graduate program at the home institution;
3. Do not owe tuition and/or fees at the home institution.

Students must meet all requirements as prescribed by the host university's regulations, deadlines, class capacities, and course prerequisites.

Registration is possible in courses at both the graduate and undergraduate levels, and in credit courses offered through distance education or other means. To be eligible, courses must be an integral part of the applicant's graduate degree program. Fee waiver is not permitted for audit or non-credit courses.

Students are subject to regulations of the home institution governing credit for the courses to be undertaken. As a condition of registration at the host institution, students will arrange for official transcripts from the host institution to be sent to the home institution confirming successful completion of courses selected.

Students must send confirmation of registration and notice of any change to the Registrar's Office of the home institution at the time of registration or course change is completed.

Students may not claim fee waivers under the terms of this Agreement for a period of more than three (3) terms in total.

Each institution has its own regulations regarding the maximum number of transfer credits permitted in a given degree program. A list of the participating Universities can be found on the Western Canadian Deans of Graduate Studies website (http://wcdgs.ca/).

Canadian University Graduate Transfer Agreement (CUGTA)

The CUGTA (https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#canadian-university-graduate-transfer-agreement) is to provide students in good standing enrolled in a graduate degree or diploma program at a Canadian Association of Graduate Studies (CAGS) member university the opportunity to avail themselves of courses offered at another member institution (host) for transfer credit to the program at their institution (home).

The CUGTA provides an application fee waiver for visiting students when applying through this agreement. Tuition fees are not automatically waived, it is up to the host institution whether tuition fees will be charged.

Program fees are always paid to the home institution, regardless of coursework taken at another institution. Students may be required to pay tuition, student, activity, application, or other ancillary fees to the host institution, according to general policies in effect at the host institution.

Only degree-level courses from recognized post-secondary institutions will be considered; courses that are part of certificate or diploma programs will not be approved.

Students must meet all requirements as prescribed by the host university's regulations, deadlines, class capacities, and course prerequisites.

Registration is possible in courses at both the graduate and undergraduate levels, and in credit courses offered through distance education or other means. To be eligible, courses must be an integral part of the applicant's graduate degree program.

Students must submit the CUGTA form to their home University at least eight (8) weeks prior to the start of classes.

Students must have the Authorization Form approved by the relevant Department/Unit Head and the Faculty of Graduate Studies at the host institution at least one (1) month prior to the commencement of the requested course(s).

Students are subject to the home institution's regulations concerning credit for the courses to be taken. As a condition of registration at the host institution, students will arrange for official transcripts from the host institution to be sent to the home institution confirming successful completion of course(s) selected.

Students must send confirmation of registration and notice of any changes to the home institution at the time of registration/registration revision is completed.

Each institution has its own regulations regarding the maximum number of transfer credits that are permitted in a given degree program.

Most but not all Canadian Universities that are a member of the Canadian Association for Graduate Studies (https://cags.ca/membership-information/) participate in the CUGTA. Student must contact the host institution for information on whether they accept the CUGTA.

Course Classifications

General Classifications

Students who register themselves through Aurora Student Information System (Aurora Student) must have prior approval of the Department/Unit Head or designate. Students registering through Aurora Student should add only those courses that are a Major (Standard "S") course in their program. Courses with Auxiliary "X", Audit "A", or Occasional "O" status (see below) must be added by the department/unit.

"X" Auxiliary course: Course is not a major requirement of the program but is required/recommended by the student's advisor/co-advisor. The student's advisor/co-advisor and Department/Unit Head must determine if there is a valid need for the registration in courses under the "X" classification. Extra courses that are not part of the Master's or Ph.D. program but which are specified and required/recommended by the student's advisor/co-advisor, may be classified as "X" and the grade will not be included in the degree GPA which appears on the transcript. However, "X" course grades may be used in the calculation of the GPA for continuation in the program and a minimum grade requirement may be required for "X" coursework by the department/unit. (Please consult the individual department's/unit's supplementary regulations.) Additionally, "X" courses are used in the calculation of the GPA for the purposes of Admission and Awards (e.g., the University of Manitoba Graduate Fellowship (UMGF) and International Graduate Student Scholarship (IGSS)). A maximum of twelve (12) credit hours under the "X" course classification is permitted while registered in a given program.

"A" Audit course: Course is not taken for credit. No grade is recorded. Additional fees will be assessed.

"O" Occasional course: Course is not a requirement of the program. Additional fees will be assessed.

Note:

- Students are not permitted to audit a course and take the same course for credit at a later date.
- Changes in course classifications are regarded as course/program changes and may not be made without approval (refer to Registration Revision (p. 91)) or after the deadline dates for course changes as indicated in the Academic Schedule of the *Calendar*.

Incomplete Courses

Students who are unable to complete the term work prescribed in a course may apply to the instructor on or before the end date for the term in which the course is offered (as set out in the Academic Schedule), for consideration of a grade classification of incomplete (designated as "I" on the student's record) and time extension for work completion. Even if the student is granted an incomplete grade and an extension for

assignment(s), the student will still need to write the final examination if one is scheduled for the course.

Taking into account the results of the final examination, the value of the term work completed, and the extent of the incomplete term work, the instructor shall calculate the temporary (incomplete) grade using a zero value for incomplete work. In no case will the satisfaction of the incomplete requirements result in a final grade that is lower than the incomplete grade recorded on the student's record.

The following maximum extensions are allowed:

- Courses ending in April: August 1 of the same year
- Courses ending between May and August: December 1 of the same year
- Courses ending in December: April 1 of the following year

If a final grade is not reported within one (1) month of the extension deadline, the letter "I" will be dropped, and the grade will remain as awarded (i.e., the incomplete grade will become the final grade). The student's opportunity to improve the grade will have lapsed. Please visit the Registrar's Office (https://umanitoba.ca/registrar/grades/#time-extensions-for-incomplete-grades) website for further information.

Continuing Courses (CO)

For those graduate level courses (6000, 7000, and 8000) which are being taken by students enrolled in the Faculty of Graduate Studies and which continue beyond the normal academic term, the instructor shall recommend that a grade classification of "CO" be used until such time as a final grade can be established. If the course is not completed by August 31, the student must re-register for the course(s).

In the absence of an assigned mark of "CO", the student may receive a mark of "F" in the course.

Note:

With the exception of "GRAD" courses and established, ongoing departmental courses such as seminars, practica, etc., a "CO" will not usually be permitted to persist longer than twelve (12) months. In exceptional circumstances where a "CO" grade is requested for a longer term of up to twenty-four (24) months, the instructor and Department/Unit Head must submit both the "CO" grade and the "Recommendation for Continuing Status of a Course (https://umanitoba.ca/graduate-studies/forms/)" form stating the reason for the "CO" and the deadline by which the course must be completed.

Cross-Listed Courses

Cross-listed courses are defined as multiple courses taught at the same time and in the same location.

The regulations below place limits on the extent to which cross-listed courses may be used to meet graduate program requirements.

1. In order to receive credit for any 7000-level course that is cross-listed with a 3000-, 4000-, or 5000-level undergraduate course, the 7000-level course must have a distinct syllabus and the course content and evaluation methods must be at the graduate-level.
2. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a 1000- or 2000-level undergraduate course unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate.
3. Graduate students will not receive credit toward meeting program requirements for any 7000-level course cross-listed with a previously completed course.

Student Status/Categories of Students

Full-Time and Part-Time Students

Graduate students are admitted as full-time students automatically for all programs. Graduate student status is not determined by the number of credit hours taken per term. Therefore, students who spend much of the time in a laboratory, in the field, or library engaged in research or writing a thesis/practicum, or who spend part of the academic year engaged in research elsewhere, are regarded as full-time students.

Requests to transfer from full-time to part-time status must be requested on the "Part-Time Status" form after discussion between the student and their advisor and co-advisor (if applicable). This discussion should address any potential impacts of requesting a change to status on the student's program of study (e.g., research and access to facilities, funding, etc.). The form must be approved by the Department/Unit Head or their designate and submitted to the Faculty of Graduate Studies. Declaration of full/part time status must be made prior to the end of the registration revision period in the Fall and/or Winter terms and within one (1) month of the start of the Summer term. Retroactive status changes will not be made.

A change to part-time status cannot be granted solely for financial circumstances. Students can request to move to part-time if they have been offered full-time employment or have medical, family or other circumstances that make it impossible to devote themselves to their graduate program full-time. Students are not permitted to change to part-time status more than once within their program unless under exceptional circumstances. Once a student declares as part-time, they may return to full-time status once, but cannot subsequently revert to part-time.

Transferring to part-time status will affect a student's maximum time to complete degree requirements as follows:

- For every full year (12 months) that a Master's student is declared as part time, they will receive an additional four (4) months in time to complete their program.
- For every two (2) full years (24 months) a Master's student is declared as part time, they will receive an additional year (12 months) in time to complete their program.
- Master's students who declare part time status for less than one year (12 months) are not permitted any additional time to complete their program.
- For every two (2) full years (24 months) that a Ph.D. student is declared as part time, they will receive an additional four (4) months in time to complete their program. •
- Ph.D. students who declare part time status for less than two (2) full years (24 months) are not permitted any additional time to complete their program.

Pre-Master's Students

In specific cases where the academic background of the student is judged to be insufficient for the given program in a department/unit, the department/unit may recommend that the student be admitted to a Pre-Master's program of study. The Pre-Master's program is intended to bring the student's standing to approximately the level of an Honours graduate in the major department/unit, and to satisfy prerequisites for courses.

See General Regulations: Pre-Master's (https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-pre-masters/).

Occasional Students

An occasional student is a student who is not currently in a degree program at The University of Manitoba and is wishing to take graduate level courses. Occasional students must apply via the regular FGS admission process (to the department/unit offering the course or majority of courses) and meet the same degree and grade point average entrance requirements as regular graduate students. Occasional students must write final examinations in the courses taken (unless audited) but will not receive credit toward a degree. Occasional students are to take the courses as "occasional" (see section Course Classifications – General Classifications above). In special circumstances, an occasional student may apply to a degree program and, if admitted, may also apply to transfer courses previously taken in the "occasional" category for credit towards their degree program.

Occasional student status is not advised for international students due to study permit limitations. International students interested in becoming an occasional student should contact the Graduate Studies admissions office and University of Manitoba International Centre.

Note:

1. Transfer of courses from the "occasional" category to a degree program is not automatic; a request for advance credit must be made within the first year of a degree program on the "Advance Credit – Transfer of Credit (https://umanitoba.ca/graduate-studies/forms/)" form.
2. Fees paid by a student while registered as an occasional student are not credited to a degree program at a later date
3. Occasional students must register via their home unit/department. Registration as an occasional student is limited to a period of one (1) academic year (September 1 - August 31). Students who wish to continue taking courses as an occasional student must reapply annually.
4. The majority of coursework per academic year must be taken at the graduate level while registered as an occasional student.
5. Students admitted as Occasional are required to upload proof of instructor permission in their application for admission to take the course(s) as Occasional.

Joint Master's (With the University of Winnipeg)

The University of Manitoba and the University of Winnipeg offer four (4) joint Master's programs: History, Religion, Public Administration, and Peace and Conflict Studies. The University of Manitoba, Faculty of Graduate Studies is responsible for the administration of the joint programs, and students must complete the regular University of Manitoba application and registration forms. Students taking Pre-Master's qualifying work for these programs register at the university where the courses are being taken.

Visiting Students

Visiting students are students who are registered at another institution who are taking one (1) or more courses at The University of Manitoba on a Letter of Permission from their home university. Visiting students must submit an online application, along with a $100.00 (CDN) non-refundable application fee, in addition to copies of transcripts from all institutions attended and a successfully completed English Language Proficiency Test from the approved list, if applicable. Students must provide a letter from their home department stating that they are in good academic standing and that they are permitted to take courses at multiple institutions.

Applications must be submitted to the Faculty of Graduate Studies a minimum of one (1) month prior to the start of the intended term of study.

Note:

1. Fees paid by a student while registered as a visiting student are not credited to a degree program at a later date.
2. Registration in the visiting student category can be for no more than one (1) academic year (September 1 - August 31) without reapplication.
3. The majority of coursework per academic year must be taken at the graduate level while registered as a visiting student.
4. Registration at two different universities on a Letter of Permission (https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#letter-of-permission) (Including Western Dean's and CUGTA) must have permission from the Dean of Graduate Studies.

Academic Performance – General

General Note

Students are responsible for ensuring that they meet all degree and program requirements. The advisor (and co-advisor, if applicable), advisory committee, and department/unit must also ensure that each student follows Faculty of Graduate Studies regulations, department/unit supplementary regulations, and meets all program requirements. The Faculty of Graduate Studies performs a final check of Faculty of Graduate Studies minimum requirements for each student just prior to graduation. Students are cautioned, therefore, to periodically check all regulations with respect to their degree requirements with their home department/unit first. Failure to meet all the requirements will render a student ineligible to graduate.

Departments/Units may make recommendations with respect to the regulations concerning minimum academic performance; however, enforcement of academic regulations rests with the Faculty of Graduate Studies. The following procedures apply to recommendations made by departments/units:

The department/unit is responsible for informing the Faculty of Graduate Studies when a student's performance is unsatisfactory in research or coursework and the department/unit must outline any recommended remedial action(s).

The department/unit must notify the student of the deficiency and of its recommendation.

If the department/unit does not recommend remediation, or if the student fails to satisfy any required remedial action, the student may be Required to Withdraw from the Faculty of Graduate Studies.

Note:

When a graduate student is Required to Withdraw from a program of study, the notation on the academic record will be: "Required to Withdraw".

A student who has been Required to Withdraw from a graduate program may be permitted to apply for admission to another graduate program only if the application for admission is approved by the Dean of the Faculty of Graduate Studies.

Voluntary withdrawal from a program is only permitted if the student is in good academic standing. Good academic standing includes, but is not limited to, the regulations contained in sections Academic Performance and Performance Related to Coursework without exceeding the time permitted to complete a program.

Recommendations of departments/units may supersede student requests for voluntary withdrawal.

Bona Fide Academic Requirements (BFAR)

The following Bona Fide Academic Requirements (BFAR) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills. Students must also meet additional requirements that may be specified for their program.

Students must meet requirements as outlined in both BFARs and Supplementary Regulation documents as approved by Senate.

Unless otherwise indicated, students may elect to complete any/all of the following requirements with or without appropriate and authorized assistive technology/aids. Students must consult Student Accessibility Services (SAS) regarding authorization for these procedures. Students may also refer to the University's Accessibility Policy and Procedures (https://catalog.umanitoba.ca/graduate-studies/university-policies-procedures/accessibility-policy/).

BFAR Statement	Taught	Assessed
Student must successfully complete a co-operative experience or practicum, if required by their program.	Master's GRAD 7030	GRAD 7030
Student must successfully complete a comprehensive exam, project, studio exhibition, or equivalent, as required by their program and determined by the assigned examining committee.	GRAD 7010 GRAD 7050 GRAD 7090 GRAD 7200	GRAD 7010 GRAD 7050 GRAD 7090 GRAD 7200 Examining/ Adjudication Committee
Student must produce a recorded/published thesis commensurate with degree being sought.	Master's GRAD 7000 Doctoral GRAD 8000	GRAD 7000 GRAD 8000
Student must successfully defend their thesis (where required), as determined by the assigned examining committee, in real-time.	Master's GRAD 7000 Doctoral GRAD 8000	GRAD 7000 GRAD 8000
Student in doctoral program must complete a candidacy exam (or equivalent) as required by their program and determined by the assigned examining committee.	GRAD 8010	GRAD 8010
Student must demonstrate knowledge of the University of Manitoba's policy on academic integrity, plagiarism, and cheating.	GRAD 7500	GRAD 7500
Student must conduct research in a safe and ethical manner, referring to their respective ethics board and supervisor(s) to ensure respect is maintained for: human dignity and/ or animal welfare; vulnerable persons; informed consent; justice and diversity; confidentiality and privacy; beneficence and non-maleficence in the work that they conduct.	GRAD 7300	GRAD 7300
Student must complete coursework as required by their program.		

Individual unit BFARs available on the Graduate Studies website. (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#all-bona-fide-academic-requirements)

Academic Performance

Student progress shall be reported ***at least*** annually, (but not to exceed once every four (4) months), to the Faculty of Graduate Studies on the "Progress Report" form (https://umanitoba.ca/graduate-studies/forms/). Performance that remains "Satisfactory" throughout the year does not need to be reported to the Faculty of Graduate Studies more than annually, but should remain on file in the department/unit.

Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Graduate Chair and/or Department/Unit Head to the Dean of the Faculty of Graduate Studies on

the "Progress Report" form. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will usually be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

Performance in Coursework

Students can consult Student Accessibility Services (SAS) if accommodations are required for coursework (see Accessibility Policy and Procedures (p. 20)).

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit recommends remedial action (subject to approval by the Dean of the Faculty of Graduate Studies).

Requirements for Remedial Action Plans

A student may be permitted to remove deficiencies in grades by repeating the course or replacing it with an equivalent substitute course as determined by the student's department/unit. The form "Recommendation to Deal with Failed Grades of Low Degree GPA (https://umanitoba.ca/graduate-studies/forms/)" must be submitted to the Faculty of Graduate Studies. In the event that a substitute course is used for remediation, the substituted course must be at the same or higher level as the failed course (e.g., at the graduate level for a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of six (6) credit hours of remediated coursework. If a course is repeated or replaced, the higher grade obtained will be used in the determination of the degree grade point average.

Students deficient in six (6) hours of credit or less with a grade of C, D, or F in a course or courses may be permitted, if the overall average is C or better, to take one (1) supplemental examination in each course (when permitted by the department/unit's supplementary regulations), to repeat the courses, or to take equivalent substitute courses.

Students receiving a grade of "C" or less in six (6) or more credit hours of courses are usually Required to Withdraw, unless otherwise stated in the department/unit's supplementary regulations. A student may also be permitted the opportunity to improve a low DGPA as determined by the Head/Graduate Chair of the student's department/unit through the registration and completion of additional course(s).

If a course is repeated or a supplemental examination is completed, the highest grade obtained in that course will be used in the determination of the degree GPA.

Students are usually expected to complete remedial action by the end of the subsequent term. If the course to be remediated is not offered in the next subsequent term, it should be taken when next offered.

Graduate students are not permitted to repeat a previously passed course, unless the department/unit recommends that course(s) be re-taken if they have lapsed or expired (refer to Master's Degree General Regulations (p. 103) and Doctor of Philosophy General Regulations (p. 109)).

Note:

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Students in a Graduate Diploma or Micro-Diploma may be permitted to remediate up to a maximum of three (3) credit hours of failures. See Graduate Diploma (p. 99) and Micro-Diploma (p. 98) sections.

Supplemental exams are not permitted to students in the Master's or Ph.D. program, unless otherwise stated in the department/unit's supplementary regulations.

Mandatory Academic Integrity Course (GRAD 7500 or GRAD 7501)

All students, including those in a Pre-Master's program, are required to register for and complete GRAD 7500 Academic Integrity Tutorial (0 credit hours) within their first term of registration. Université de Saint-Boniface graduate students may choose to complete GRAD 7500 or the French-language equivalent, GRAD 7501.

Failure to complete this course will result in a registration hold and a grade of "F/NP" being assigned to the course which may lead to being "Required to Withdraw" from the graduate program.

Notes:

Students who have successfully completed GRAD 7500 in a previous program are not usually required to repeat the course upon entry to their new program so long as no more than one (1) term separates one program from another.

Students who have not completed GRAD 7500 or GRAD 7501 prior to embarking on a leave of absence must register in the course upon their return to their program.

Visiting and Occasional students are not expected to complete GRAD 7500. For further information see GRAD 7500 FAQ (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#grad-7500-academic-integrity).

Mandatory Research Integrity Online Course (GRAD 7300)

All students, including those in a Pre-Master's program, are recommended to register for and complete GRAD 7300 prior to applying to any ethics boards which are appropriate to their proposed research or within the first calendar year of their program, whichever comes first. Failure to complete this course will result in a registration hold and a grade of "F/NP" being assigned to the course which may lead to being "Required to Withdraw" from the graduate program.

Failure to complete this course will result in a registration hold and a grade of "F/NP" being assigned to the course which may lead to being "Required to Withdraw" from the graduate program.

Notes:

Students who have successfully completed GRAD 7300 in a previous program are not usually required to repeat the course upon entry to their new program so long as no more than one (1) term separates one program from another.

Students who have not completed GRAD 7300 prior to embarking on a leave of absence must register in the course upon their return to their program.

Visiting and Occasional students are not expected to complete GRAD 7300. For further information see GRAD 7300 FAQ (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#grad-7300-research-integrity).

Graduate Focus on Aging Concentration

The Graduate Focus on Aging Concentration is available to any interested Master's or Doctoral student who is enrolled in the Faculty of Graduate Studies and whose graduate work focuses on aging. Graduate students who are not in a thesis/practicum-based program will be considered on a case-by-case basis and will require approval in advance by the Dean of the Faculty of Graduate Studies.

To be eligible, a "Student intention to receive the Graduate Focus on Aging Concentration (https://umanitoba.ca/graduate-studies/forms/)" form must be submitted to the Faculty of Graduate Studies. Students must complete the requirements of the program to which they have been admitted and the requirements of the Graduate Focus on Aging Concentration.

The Graduate Focus on Aging Concentration requirements include:

1. Six (6) credit hours of graduate (7000-level or higher) courses that focus on aging and are approved by the student's Advisory Committee;
2. A thesis/practicum on an aging-related topic;
3. Having at least one advisory committee member who is officially affiliated with the Centre on Aging as a Research Affiliate (https://umanitoba.ca/centre-on-aging/research/affiliates/); and
4. Participating in the annual Spring Research Symposium of the Centre on Aging at least once during their program of study as a poster presenter.

Graduate students may be able to attain their 6 credit hours of courses within the existing course requirements of their graduate program. Students must attain a minimum grade of C+ (or higher, if stipulated in the department/unit supplementary regulations), for the required 6 credit hours of aging courses.

Graduate students who are not in a thesis/practicum-based program will be considered on a case-by-case basis and will require approval in advance by the Dean of the Faculty of Graduate Studies.

Student progress in the Graduate Focus on Aging Concentration would usually be discussed with the student's Advisory committee, and progress documented on the "Student Intention to receive the Graduate Focus on Aging Concentration (https://umanitoba.ca/graduate-studies/forms/)" form which must accompany the Progress Report form submitted to the Faculty of Graduate Studies. The final Graduate Focus on Aging Concentration Completion (https://umanitoba.ca/graduate-studies/forms/) form must be submitted no later than one week prior to the FGS deadline for graduands to submit (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/#thesis-submission-deadlines-and-requirements) theses/practica and other reports.

Graduate Focus in Disability Studies Concentration

The Graduate Focus in Disability Studies Concentration is available to any interested Master's or Doctoral student who is enrolled in the Faculty of Graduate Studies. To be eligible, students must complete the requirements of the program to which they have been admitted and the requirements of the Graduate Focus in Disability Studies.

The concentration requires that students complete 6 or 9 credit hours of courses:

- DS 7020 History of Disability (3), and one of
- DS 7010 Disability Studies (6)
  or
- DS 7030 Evaluation and Application of Research Methods in Disability Studies (3)

Graduate students may be able to attain the 6 or 9 credit hours of courses within the existing course requirements of their graduate program depending on the program supplementary regulations. This should be discussed with the student's Advisory committee. The Graduate Focus in Disability Studies Concentration Completion (https://umanitoba.ca/graduate-studies/forms/) form must be submitted no later than one week prior to the FGS deadline for graduands to submit (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/#thesis-submission-deadlines-and-requirements) theses/practica and other reports.

General Regulations – Pre-Master's

Admission and Program Requirements

Graduates of bachelor degree programs with a minimum Grade Point Average (GPA) of 3.0 on a 4.5 GPA scale (or equivalent) in the last two (2) previous years of full-time university study (60 credit hours) may be considered for admission to a Pre-Master's program. Departments/Units may specify higher or additional criteria. Admission to a Pre-Master's program does not guarantee future admission to a Master's program.

The purpose of the Pre-Master's program of study is to bring a student's background up to the equivalent of a required four (4)-year undergraduate degree and/or provide knowledge of a particular discipline. Departments/Units should assign to students, as part of their Pre-Master's program of study, an appropriate number of applicable upper level (3000 or 4000) undergraduate courses. These courses may not be transferred into a Master's program. Pre-Master's students are not usually permitted to register in 7000-level courses or above, with the exception of GRAD 7300 and GRAD 7500 (or GRAD 7501), unless prior permission is granted by the Dean of the Faculty of Graduate Studies or designate. If permission is granted, students may take a maximum of three (3) credit hours at the 7000 level or above and these credit hours must be taken as Occasional ("O").

A Pre-Master's student may only transfer a maximum of three (3) credit hours at the 7000 level into a prospective Master's program of study.

Academic Performance

The Department/Unit Head is responsible for assigning the courses and monitoring the progress of each student.

A minimum degree grade point average of 3.0 with no grade below C+ must be maintained to continue in a Pre-Master's program. Students

who fail to maintain this standing will be Required to Withdraw unless remedial action recommended by the department/unit (as described below) is approved by the Dean of the Faculty of Graduate Studies. Students can consult Student Accessibility Services (SAS) if accommodations are required for coursework (see Accessibility Policy and Procedures (p. 20)).

General Regulations – Micro-Diploma

Program Requirements

A Graduate Micro-Diploma is a short, flexible program of study focused on core knowledge in a field or interdisciplinary field of study at the graduate level. A Graduate Micro-Diploma consists of a minimum of six (6) credit hours to a maximum of nine (9) credit hours of coursework at the 7000-level or above. It may be stand alone and/or embedded in a graduate degree. A minimum of six (6) credit hours must be delivered by The University of Manitoba.

All students should consult department/unit supplementary regulations for specific details regarding a particular Graduate Micro-Diploma.

Admission

Students who are eligible to be considered for direct admission to a program of study leading to the Graduate Micro-Diploma include:

- Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.
- Graduates from first-cycle Bologna compliant degrees.
- Students who have completed a Pre-Master's program from:
  - The University of Manitoba (see General Regulations - Pre-Master's (https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-pre-masters/)); or
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.

All students applying for a Graduate Micro-Diploma program must have attained a minimum GPA of 3.0 in the last two (2) previous years of full-time university study (60 credit hours). This includes those applying for direct admission and those entering from a Pre-Master's program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

Performance in Coursework

Students can consult Student Accessibility Services (SAS) if accommodations are required for coursework (see Accessibility Policy and Procedures (p. 20)).

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies or designate.

Requirements for Remedial Action Plan

A student may be permitted to remediate deficiencies in grades by repeating the course or replacing it with an equivalent substitute course as determined by the department/unit. In the event that a substitute course is used for remediation, the substituted course must be at the same or higher level as the failed course (e.g., at the graduate level for a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of three (3) credit hours of coursework. If a course is repeated or replaced, the highest grade obtained will be used in the determination of the degree grade point average. Students receiving a grade of "C" or less in more than three (3) credit hours of coursework are usually Required to Withdraw from the Micro-Diploma, unless otherwise stated in the department/unit's supplementary regulations. A student may also be permitted the opportunity to improve a low DGPA as determined by the Graduate Chair of the student's department/unit through the registration and completion of additional course(s).

Students are usually expected to complete remedial action by the end of the subsequent term.

Graduate students are not permitted to repeat a previously passed course, unless the department/unit recommends that course(s) be re-taken if they have lapsed or expired (refer to Master's Degree General Regulations (p. 103) and Doctor of Philosophy General Regulations (p. 109)).

Note:

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Supplemental exams are not permitted to students in the Graduate Micro-Diploma program, unless otherwise stated in the department/unit's supplementary regulations.

Time in Program

The expected time-to-completion for students in the Micro-Diploma program is one (1) academic year (i.e., three (3) consecutive terms). Micro-Diploma students are subject to the same re-registration requirements as all other graduate students.

Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot usually be used for credit towards another degree;
- may not exceed three (3) credit hours of coursework required of the student's Graduate Micro-Diploma program at The University of Manitoba, so long as six (6) credit hours of the Graduate Micro-Diploma program is taken at the University of Manitoba.

Permission is granted in the form of a Letter of Permission (https://umanitoba.ca/graduate-studies/programs-study/courses-taken-

elsewhere/#letter-of-permission) which may be obtained by making an application to the Faculty of Graduate Studies; an original transcript and course equivalency must be provided.

Recognition for Credit

Graduate-level courses completed as part of a Graduate Micro-Diploma may be recognized toward a Graduate Diploma or graduate degree program (where appropriate) and subject to the Senate approved program regulations. Graduate Micro-Diplomas may be stackable or laddered (refer to definitions per the Certificate and Diploma Framework (https://umanitoba.ca/admin/governance/media/Certificate_and_Diploma_Framework_2021_02_03.pdf)) into Graduate Diplomas or graduate degree programs in same or related fields of study.

General Regulations – Diploma

Program Requirements

A graduate diploma is a structured program of study focused on developing graduate-level knowledge in a field or interdisciplinary field of study. A graduate diploma consists of a minimum of twelve (12) credit hours to a maximum of eighteen (18) credit hours of coursework primarily at the 7000-level or above. It is a stand-alone program. A minimum of 50% of the credit hours must be delivered by The University of Manitoba.

All students should consult department/unit supplementary regulations for specific details regarding a particular Graduate Diploma.

Admission

Students who are eligible to be considered for direct admission to a program of study leading to the diploma include:

- Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.
- Graduates from first-cycle Bologna compliant degrees.
- Students who have completed a Pre-Master's program from:
  - The University of Manitoba (see General Regulations - Pre-Master's (https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-pre-masters/)); or
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.

All students applying for a diploma program must have attained a minimum GPA of 3.0 (or equivalent) in the last two (2) previous years of full-time university study (60 credit hours). This includes those applying for direct admission and those entering from a Pre-Master's program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

Performance in Coursework

Students can consult Student Accessibility Services (SAS) if accommodations are required for coursework (see Accessibility Policy and Procedures (p. 20)).

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

A student may be permitted to remove deficiencies in grades by repeating the course or replacing it with an equivalent substitute course. In the event that a substitute course is used for remediation, the substituted course must be at the same or higher level as the failed course (e.g., at the graduate level for a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of three (3) credit hours of remediated coursework. If a course is repeated or replaced, the highest grade obtained will be used in the determination of the degree grade point average. Students receiving a grade of "C" or less in more than three (3) credit hours of coursework are usually Required to Withdraw, unless otherwise stated in the department/unit's supplementary regulations. A student may also be permitted the opportunity to improve a low DGPA as determined by the Graduate Chair of the student's department/unit through the registration and completion of additional course(s).

Students are usually expected to complete remedial action by the end of the subsequent term.

Graduate students are not permitted to repeat a previously passed course, unless the department/unit recommends that course(s) be re-taken if they have lapsed or expired (refer to Master's Degree General Regulations (https://catalog.umanitoba.ca/graduate-studies/academic-guide/masters-degrees-general-regulations/#Lapse-Credit-Courses) and Doctor of Philosophy General Regulations (https://catalog.umanitoba.ca/graduate-studies/academic-guide/doctor-philosophy-general-regulations/#Lapse-Credit-Courses)).

Note:

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Supplemental exams are not permitted to students in the Graduate Diploma program, unless otherwise stated in the department/unit's supplementary regulations.

Time in Program

The expected time-to-completion for students in the Diploma program is the same as the Master's. The minimum time is equivalent to two (2) terms (8 months) and the maximum time allowed for the completion of the Diploma is four (4) years for students declared as full-time and six (6) years for students declared as part-time (see Student Status/Categories of Students (https://catalog.umanitoba.ca/graduate-studies/academic-guide/application-admission-registration-policies/#Student-Status) for information on calculating maximum time for students).

Diploma students are subject to the same re-registration requirements as all other graduate students.

Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot be used for credit towards another degree;
- may not exceed 50% of the credit hours of coursework required of the student's Graduate Diploma program at The University of Manitoba.

Permission is granted in the form of a Letter of Permission (https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#letter-of-permission) which may be obtained by making an application to the Faculty of Graduate Studies; an original transcript and course equivalency must be provided.

Recognition for Credit

Graduate-level courses completed as part of a Graduate Diploma may be recognized toward a graduate degree program (where appropriate) and subject to the Senate approved program regulations. Graduate Diplomas may be stackable or laddered (refer to definitions per the Certificate and Diploma Framework (https://umanitoba.ca/governance/governing-documents-academic/)) into graduate degree programs in same or related fields of study.

Master's Degrees General Regulations

General

Individual departments/units may offer Master's programs in one or more of the following formats:

- Thesis/practicum-based;
- Course-based;
- Comprehensive Exam;
- Project;
- Major research paper.

Admission

Students who are eligible to be considered for direct admission to a program of study leading to the Master's degree include:

- Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.
- Graduates from first-cycle Bologna compliant degrees.
- Students who have completed a Pre-Master's program from:
  - The University of Manitoba (see General Regulations - Pre-Master's (p. 97)); or
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.

All students applying for a Master's degree program must have attained a minimum GPA of 3.0 out of 4.5 (or equivalent) in the last two (2) years of full-time university study (60 credit hours). This includes those applying for direct admission and courses completed as part of a Pre-Master's program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

Program Requirements

Students must complete the requirements for one of the programs of study described below for the Master's degree. Specific requirements for individual programs of study are determined by the department/unit offering the program. Credit hours and course requirements of programs subject to an external accrediting body shall reflect the requirements of the appropriate accrediting body and shall be detailed in the program's supplementary regulations.

Any single course cannot be used for credit toward more than one degree.

Thesis/Practicum Route

A minimum of twelve (12) credit hours of coursework, unless otherwise stated in the department's/unit's supplementary regulations, plus a thesis or practicum is required. The minimum must include at least six (6) credit hours at the 7000-level or above, with the balance of the coursework at the 3000-level or above. A maximum of twenty-four (24) credit hours of coursework is allowed unless the department's/unit's supplementary regulations indicate otherwise. The student must complete the thesis/practicum through The University of Manitoba.

Course-based, Major Research Paper, Project or Comprehensive Examination Route

A minimum of twenty-four (24) credit hours of coursework is required. If the student is in the comprehensive examination route, a comprehensive examination(s) is required. The minimum must include at least eighteen (18) credit hours at the 7000-level or above with the balance of the coursework at the 3000-level or above. A maximum of forty-eight (48) credit hours of coursework is allowed unless a department's/unit's supplementary regulations indicate otherwise. Refer to unit supplementary regulations concerning specific regulations on coursework, major research paper, project and/or comprehensive examination requirements.

Language Requirements

Some departments/units specify an additional language requirement for the Master's degree. Students should check department/unit supplementary regulations regarding this requirement.

Advance Credit

Advance credit for courses completed prior to admission to a Master's program will be considered on a case-by-case basis. The student's department/unit must make a request to the Faculty of Graduate Studies by completing the "Recommendation for Advance Credit-Transfer of Courses (https://umanitoba.ca/graduate-studies/forms/)" form.

- Application for advance credit must be made within the first year of the program (see Lapse or Expiration of Credit of Courses (p. 103)).
- No more than 50% of the required coursework for the program can be achieved using advance credit.
- A course may not be used for credit toward more than one (1) degree.
- The student must register at The University of Manitoba for at least two (2) terms within a single academic year and must also complete all other program requirements at The University of Manitoba (or in the case of a Joint Master's Program student, at The University of Winnipeg).
- A Pre-Master's student may only transfer a maximum of 3 credit hours at the 7000 level taken as occasional into a prospective Master's program of study.

Regardless of the number of courses approved for which advance credit is granted, all students are required to pay all applicable program fees (i.e., program fees will not be pro-rated according to advance credit granted).

Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot be used for credit towards another degree;
- may not exceed 50% of the minimum credit hours of coursework required of the student's graduate program at The University of Manitoba.

Permission is granted in the form of a Letter of Permission (https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#letter-of-permission) which may be obtained by making an application to the Faculty of Graduate Studies; an official transcript and course equivalency must be provided.

Time in Program

The minimum time for students in the Master's program is equivalent to two (2) terms. Completion of most programs requires more than this and students should check department/unit supplementary regulations regarding specific requirements.

The maximum time allowed for the completion of the Master's degree is four (4) years for students declared as full-time and six (6) years for students declared as part-time (see Student Status/Categories of Students for information on calculating maximum time for students). Individual departments/units and/or programs may have specified minimum and maximum time limits.

Requests for extensions of time to complete the degree will be considered on an individual basis and must be submitted to the Dean of the Faculty of Graduate Studies using the "Time Extension Request (https://umanitoba.ca/graduate-studies/forms/)" form. This form should be submitted at the beginning of the student's last term in program, prior to expiration of the respective maximum time limit. Time extension requests require an explanation of the need for the extension and the goals to be met during the extension period as well as a timeline for meeting the stated goals. Future extensions will be considered only if there is evidence progress was made on the goals outlined in the previous extension request. If progress is not evident, the request must describe the circumstances that prevented progress on the identified goals. Extensions also must recognize the grad deadlines (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/#submitting-your-thesis-to-committee-members) for the respective graduation period.

A student who has not completed the degree requirements within the maximum time limit or within the time limit of the extension will be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

Student's Advisor and Co-Advisor

Student's Advisor

Each student should have an advisor upon entry into the program, and must have one assigned no later than one (1) term following initial registration. Advisors are required for thesis/practicum routes, but not usually course-based routes or some comprehensive exam routes. In departments/units where the choice of thesis/practicum topic and thesis/practicum advisor are postponed after a student's entry into the program, the Department/Unit Head, within one (1) term, shall appoint a faculty member to advise the student in the interim period before the regular advisor is assigned or chosen. In all programs that require an advisor, students must have an advisor through to the end of their program .

The advisor is responsible for supervising the student's graduate program. The advisor is the student's primary contact at the University of Manitoba and must be familiar with the general policies and regulations of the Faculty of Graduate Studies as well as the specific supplementary regulations of their academic department/unit. In this capacity, the advisor assists the student in planning the graduate program and ensures that the student is aware of all graduate program requirements, degree regulations, and general regulations of the academic department/unit, the Faculty of Graduate Studies, the university, and external funding agencies. The advisor provides counsel for all aspects of the graduate program and stays informed of the student's scholarly activities and progress. The student's advisor also acts as a channel of communication to the student's advisory committee, the department/unit and the Faculty of Graduate Studies.

. The advisor must:

- hold an appointment in the student's department/unit;
- be a member of the Faculty of Graduate Studies[1];
- hold at least a Master's degree or equivalent[2];
- be active in their field of research;
- have expertise in a discipline related to the student's program.

1 See https://umanitoba.ca/graduate-studies/graduate-studies-administration (https://umanitoba.ca/graduate-studies/graduate-studies-administration/) for details.

2 Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis. The potential advisor's demonstrated research record and current research activities will be considered as part of the equivalency assessment. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Master's or Ph.D.

It is the responsibility of the Department/Unit Head to determine whether faculty members meet these criteria, and also to report to the Dean of the Faculty of Graduate Studies on equivalency as necessary. Any exceptions

or special circumstances must be recommended by the Department/Unit Head and approved by the Dean of the Faculty of Graduate Studies who considers each case on an individual basis.

Student's Co-advisor

Upon approval of the Department/Unit Head, an advisor and a maximum of one (1) co-advisor may advise a student. The co-advisor must:

- be a member of the Faculty of Graduate Studies[1];
- hold a Master's or equivalent[2];
- be active in research;
- have expertise in a discipline related to the student's program;

1 See https://umanitoba.ca/graduate-studies/graduate-studies-administration for (https://umanitoba.ca/graduate-studies/graduate-studies-administration/) details.

2 Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential co-advisor's demonstrated research record and current research activities. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Master's or Ph.D.

The co-advisor may be identified either at the beginning of, or mid-way through, a student's program. In all instances, the Faculty of Graduate Studies must be informed of, and approve, the co-advisor arrangement. If a co-advisor is added midway through the student's program, a new Advisor-Student Guidelines must be completed.

When an advisor and co-advisor are assigned, together they shall fulfill the role of the advisor (that is, neither shall fulfill any other advisory or examining committee membership requirements for that student). One (1) advisor must be identified as the primary advisor. Both the advisor and co-advisor share a single vote in matters regarding student progress and performance. Both the advisor and co-advisor's signatures are required on all documents where the advisor's signature is required.

Student's Advisor/Co-advisor

A student who also holds an appointment at The University of Manitoba as a member of the academic staff with faculty rank cannot have an advisor or co-advisor with an appointment in the same department/unit.

The advisor, co-advisor (if applicable) and student must discuss and complete the Faculty of Graduate Studies Advisor-Student Guidelines prior to the commencement of any research and no later than the submission of the first Progress Report for the student. If a student does not have an advisor/co-advisor, then the interim advisor* will be required to complete the Advisor-Student Guidelines. The advisor/co-advisor and the student are required to approve the agreement. If the parties cannot agree on one or more component(s) of the Advisor-Student Guidelines, the matter should be referred to the Department/Unit Head, Graduate Chair, or the Dean of the Faculty of Graduate Studies. A new Advisor-Student Guidelines is to be completed if there is a change in advisor/co-advisor or when a co-advisor is added mid-way through the student's program.

Should, during the student's program, the relationship between the student and advisor/co-advisor significantly deteriorate, the matter should be referred sequentially to the Department/Unit Graduate Chair, the Head of the department/unit, then to the Associate Dean working with the department/unit in the Faculty of Graduate Studies and finally the Dean of the Faculty of Graduate Studies. Students can also seek support from other offices including, but not limited to, Student Advocacy & Case Management and the Student Counselling Centre.

It is the responsibility of the department/unit offering the program in which the student is studying to arrange an alternate advisor if this is appropriate and necessary. All students should consult department/unit supplementary regulations for specific details regarding advisor/co-advisor requirements. Departments/units who have difficulty finding an alternate advisor need to consult with the Faculty of Graduate Studies' Associate Dean working with the department/unit for support to pursue all reasonable options given the theoretical and research expertise required of an advisor in relation to the thesis/practicum. If an advisor cannot be secured within one term, the student cannot remain in their program.

* In departments/units where the choice of thesis/practicum topic and thesis/practicum advisor are postponed after a student's entry into the program, the Department/Unit Head, within one (1) term, shall appoint a faculty member to advise the student in the interim period before the regular advisor is assigned or chosen.

Advisory Committee

Conflict of Interest

There are several circumstances that might lead to a real, perceived or potential Conflict of Interest (COI) in advisory and examining committees. A real COI could be present due to the existence of a (past or present) personal relationship that is romantic, sexual, marital, personal or familial. There is a potential for a perceived COI in cases of recent (within the last 5 years) collaboration among committee members, which may result in the perception of a lack of fairness or impartiality. These examples are not intended to be comprehensive, and are provided solely for illustration. The University of Manitoba Conflict of Interest Policy (https://umanitoba.ca/admin/governance/governing_documents/community/248.html) and Conflict of Interest Procedures (https://umanitoba.ca/admin/governance/governing_documents/community/962.html) as well as the Conflict of Interest Between Evaluators and Students due to Close Personal Relationships (https://umanitoba.ca/admin/governance/governing_documents/students/277.html) should also be consulted.

In addition to following the processes outlined in the above policies, COIs that exist within advisory and examining committees and proposed mitigation measures must be declared in writing to the Faculty of Graduate Studies to provide transparency to all relevant parties (including the student, committee members, unit leadership, and the Faculty of Graduate Studies) at the time they arise. All reported conflicts will be reviewed by the Dean of the Faculty of Graduate Studies (or designate) and reported to the Vice President (Administration). If the conflict is deemed sufficiently significant and cannot be mitigated, one or more committee members may need to be replaced or a new committee established. Committees should consider each year at the time of the progress report whether new conflicts of interest have arisen during the reporting period.

It is the student's role to inform the Faculty of Graduate Studies of any changes in their student registration or employment status that may be perceived as a COI. For example, if a student is hired as an Instructor or an Assistant Professor in any unit at the university, they are to inform FGS of their employment status change in order to disclose and address potential COIs.

Thesis/Practicum Route

Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during their research program. The advisor/co-advisor is the Chair of the advisory committee.

The advisory committee must consist of a minimum of three (3) voting members (the advisor/co-advisor have a single vote), at least two (2) of whom must be members of the Faculty of Graduate Studies (https://umanitoba.ca/graduate-studies/graduate-studies-administration/).

All examiners must be deemed qualified by the Department/Unit Head and be willing to serve. It is expected that advisory committee members will have a Master's degree or equivalent. **Equivalency will be determined by the Dean of the Faculty of Graduate Studies or designate.**

Individuals who are not a member of the Faculty of Graduate Studies, and who do not hold a Master's degree or equivalent, but who possess specific and extensive expertise and experience, such as professionals, artists, Knowledge Keepers or Elders, may serve on the advisory committee as a full voting member. No more than one such knowledge expert may serve on any individual advisory committee and must be nominated by the Department/Unit Head or Graduate Chair with a justification of their role and be approved by the Dean of the Faculty of Graduate Studies or designate.

Advisory committees may alternatively include one (1) non-voting invited member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies. Committees may include a Knowledge Expert or invited member, not both.

Under no circumstances are graduate students, Postdoctoral Fellows, and Research Assistants or Associates registered/employed at any institution to serve on graduate student advisory or examining committees, regardless of whether or not they hold a rank of Adjunct Professor.

The composition of, and any changes to, the advisory committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies.

Additional specifications, if any, regarding the advisory committee are found in the department/unit supplementary regulations and students should consult these regulations for specific requirements.

Course-based, Major Research Paper, or Comprehensive Examination Route

Usually, advisory committees are not required in these routes; however, the department/unit may specify advisory committee requirements in their supplementary regulations.

Courses and Performance

Course or Program Changes

Students are not permitted to change their program of study, including withdrawal from individual courses, without the approval of their advisor/co-advisor (and/or advisory committee) and Department/Unit Head. Withdrawal from courses or changes of course category without such approval may result in the student being Required to Withdraw from the Faculty of Graduate Studies.

Lapse or Expiration of Credit of Courses

Courses completed more than seven (7) years prior to the date of awarding of a degree are considered to have lapsed and may not usually be used for credit toward that degree. A department/unit may request an exception to this limit on behalf of the student. Such requests, which will be evaluated on a case-by-case basis, must be submitted via the Course Currency form (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms) and accompanied by supporting information including a detailed summary of the content of the course as taken initially and as offered most recently, and a detailed rationale explaining how the student has maintained knowledge of the course content. If FGS approves the course's currency, the approval will be valid for one (1) year. After one (1) year, an updated Course Currency form may be required.

Courses completed more than ten (10) years prior to the date of awarding of a degree are deemed **expired and cannot** be used for credit toward that degree.

In the event that coursework is no longer considered current or has expired, students must take additional coursework (as recommended by the Department/Unit Head, or designate, and as approved by the Dean of the Faculty of Graduate Studies) to meet the minimum credit hour requirements for their program. The department/unit may recommend that students re-take previously passed course(s) which have lapsed or expired.

Academic Performance

Student progress shall be reported ***at least*** annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the "Progress Report (https://umanitoba.ca/graduate-studies/forms/)" form. Performance that remains "Satisfactory" throughout the year does not need to be reported to the Faculty of Graduate Studies more than annually but should remain on file in the department/unit. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will usually be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless the department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

Students are usually expected to complete remedial action by the end of the subsequent term.

Performance not Related to Coursework

In some departments/units and program routes, students are required to demonstrate satisfactory academic performance in areas not related to performance in courses (including, but not limited to, attendance at or participation in course lectures, seminars and in laboratories and progress in research, thesis or practicum). The specific nature of satisfactory academic performance is outlined in individual department/unit supplementary regulations and students should consult these supplementary regulations for specific requirements. Unsatisfactory performance must be reported to the Faculty of Graduate Studies

on the "Progress Report" (https://umanitoba.ca/graduate-studies/forms/) form. Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Department/Unit Head to the Dean of the Faculty of Graduate Studies.

Academic Requirements for Graduation

All students must:

- maintain a minimum degree grade point average (DGPA) of 3.0 with no grade below C+;
- complete GRAD 7500
- complete GRAD 7300
- meet the minimum and not exceed the maximum course requirements; and
- meet the minimum and not exceed the maximum time requirements for program completion and lapse and expiration of course credit.

Individual departments/units may have additional specific requirements for graduation and students should consult department/unit supplementary regulations for these specific requirements.

Thesis/Practicum Route

Thesis vs. Practicum

Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum. The thesis/practicum will usually be written in English but may be written in French. Departmental/unit supplementary regulations may allow the thesis/practicum to be written in a language other than English or French. Committee members must be able to evaluate the thesis/practicum in the chosen language.

The thesis must be written according to a standard style acknowledged within the student's particular field of study and recommended by the department/unit, be lucid and well-written, and be reasonably free from errors of style and grammar (including typographical errors). Additional requirements for thesis formatting are outlined in Thesis/Practicum Types (p. 120).

The thesis is developed under the mentorship of the advisor/co-advisor. Individual departments/units may have specific guidelines regarding the thesis proposal and its acceptance by the student's advisory committee and Department/Unit Head; students should consult department/unit supplementary regulations for specific requirements. Research must be approved by the appropriate Human Research Ethics Board or Animal Care Committee, if applicable, before the work has begun on the thesis research.

A practicum differs from the thesis in its emphasis on the application of theory, it is however similar in scope, span, and rigour. The practicum takes the form of an exercise in the practical application of knowledge and skill. It usually involves the careful definition of a problem, the application of appropriate knowledge and skills to the problem, and a report of the results in a manner suitable for evaluation by an examining committee. Individual departments/units have specific requirements for graduation and students should consult department/unit supplementary regulations for specific requirements. Research must be approved by the appropriate Human Research Ethics Board or Animal Care Committee, if applicable, before the work has begun on the practicum.

Examining Committee

The advisor/co-advisor will recommend an examining committee to the Department/Unit Head for approval, which shall then be reported to the Faculty of Graduate Studies on the "Master's Thesis/Practicum Title and Appointment of Examiners" (https://umanitoba.ca/graduate-studies/forms/) form. This form must be approved by the Dean of the Faculty of Graduate Studies at least two (2) weeks prior to the distribution of the thesis to committee members for written examination.

Usually, the examining committee will be the same as the advisory committee unless otherwise stipulated in the department's/unit's supplementary regulations. The examining committee must consist of a minimum of three (3) members (including the advisor/co-advisor), at least two (2) of whom must be members of the Faculty of Graduate Studies. All examiners must be deemed qualified by the Department/Unit Head and be willing to serve. It is usually expected that examination committee members will have a Master's degree or equivalent. Knowledge Experts and invited members are exempt from this requirement. The composition of, and any changes to, the examining committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies. Individual departments/units establish specific requirements for examination and students should consult department/unit supplementary regulations for specific requirements.

Under no circumstances are graduate students, Postdoctoral Fellows, and Research Assistants or Associates to serve on graduate student examining committees, regardless of if they hold a rank of Adjunct Professor.

Written Examination

The Head of the department/unit arranges for the distribution of the thesis/practicum to the examiners for written examination. A student has the right to an examination of the thesis/practicum if they believe it is ready for examination. It is the department/unit's responsibility to advise the student of any risk involved should they decide to proceed against the department/unit's recommendation. It is the duty of all examiners to read the thesis/practicum and report on its merits according to the following categories:

- Acceptable, without modification or with minor revision(s); or
- Acceptable, subject to modification and/or revision(s); or
- Not acceptable.

If two or more examiners do not approve the thesis, then the student is deemed to have failed the written examination. The failure must be reported to the Faculty of Graduate studies as "not approved" on the Master's Thesis/Practicum Final Report (https://umanitoba.ca/graduate-studies/forms/) form.

Note that advisors and co-advisors share a single vote.

Oral Examination

For departments/units requiring students to pass an oral examination on the subject of the thesis/practicum and matters relating thereto, the format of the oral examination is described in the supplementary regulations of the department/unit. Students should consult these supplementary regulations for specific requirements. A student has the right to an examination of the thesis/practicum if they believe it is ready for examination. It is the department/unit's responsibility to advise the student of any risk involved should they decide to proceed against the department/unit's recommendation.

The oral examination should be completed within one (1) month of distribution of the reports on the written thesis/practicum to the examining committee.

The oral examination may be held in-person, remotely, or using a hybrid model. All members of the examining committee should be present in real time at the examination. Under exceptional circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, one (1) member may be absent from the proceedings and required to submit questions. No recordings will be permitted. Any in-person components of the oral examination must be held at either The University of Manitoba Fort Garry or Bannatyne campus, Université de Saint-Boniface, or the St. Boniface Hospital Albrechtsen Research Centre usually during regular business hours.

The oral examination shall be open to all members of The University of Manitoba community except in exceptional cases. The oral examination may be closed, for example, when the results of the thesis/practicum research must be kept confidential for a period of time. In such cases, the examining committee and Department/Unit Head must request a closed examination to the Dean of the Faculty of Graduate Studies, who shall then decide that the final examination be closed to all but the examining committee. The Dean of the Faculty of Graduate Studies (or delegate) reserves the right to attend a closed examination.

The oral examination will usually be held in English but may be held in French. Departmental/Unit supplementary regulations may allow the oral examination to be held in a language other than English or French.

Following completion of the examination of the thesis/practicum, examiners will determine the results of the oral examination and the written thesis/practicum.

The examiners will also determine the nature of and procedures for approval of any revisions that will be required prior to submission of the thesis/practicum to the Faculty of Graduate Studies (via MSpace). The advisor/co-advisor is usually responsible for ensuring that revisions are completed according to the instructions from the examining committee.

The final assessment of the examiners shall be reported to the Faculty of Graduate Studies as either "approved" or "not approved" on the Master's Thesis/Practicum Final Report (https://umanitoba.ca/graduate-studies/forms/) form submitted by the advisor. Each examiner must sign the form. If two (2) or more examiners do not approve the thesis/practicum, the student is deemed to have failed the examination.

Failure

All failures must be reported to the Faculty of Graduate Studies at either the written or oral examination stage. In the case of a failure of the thesis/practicum at the Master's level, the student may be allowed a second examination attempt. In this case, a detailed written report will be prepared by the Chair of the examination committee and submitted to the Faculty of Graduate Studies, who will make the report available to the student, the student's advisor/co-advisor and the Department/Unit Head. Without this detailed report, the student may not undergo a second examination. The Department/Unit Head shall convene a meeting of the members of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard and/or prepare for the second examination.

A student will be Required to Withdraw when the thesis/practicum has been rejected twice at the stage where:

- The examining committee reports on the merits of the written thesis/practicum;
- The oral examination; or
- A combination of both stages.

Style and Format

The thesis/practicum must be written according to a standard style acknowledged by a particular field of study (please refer to Thesis/Practicum Types (p. 120)).

Submission of the Final Copy

Following the approval of the thesis/practicum by the examining committee via the "Master's Thesis/Practicum Final Report (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form and the completion of any revisions required by that committee, the thesis/practicum must be submitted to the Faculty of Graduate Studies digitally through MSpace (https://umanitoba.ca/libraries/help-and-services/mspace/), the University's institutional repository.

Publication and Circulation of the Thesis/Practicum

Every graduate student registering in a thesis/practicum Master's program at The University of Manitoba shall be advised that, as a condition of being awarded the degree, they will be required to grant a licence of partial copyright to the University and to the Library and Archives Canada for any thesis or practicum submitted as part of their degree program.

Note: This licence makes the thesis/practicum available for further research only. Publication for commercial purposes remains the sole right of the author.

The "Copyright Licence/Infringement" form must be completed in MSpace. This and other related regulations may give rise to important questions of law, and students may need additional legal advice on the copyright laws of Canada and/or other countries. Students who wish to obtain legal advice concerning their subsequent rights are advised to do so prior to signing the agreements. Signing of the licence agreements is usually done after the contents of the thesis/practicum have been delineated and the importance of copyright and/or patents fully understood and appreciated.

In The University of Manitoba's view, publication in the above manner should not preclude further publication of the thesis or practicum report or any part of it in a journal or in a book as this is a routine University requirement to contribute to open scholarship, and publication in MSpace attracts a different audience than a peer-reviewed and edited book or journal. In such cases, an acknowledgement that the work was originally part of a thesis/practicum at The University of Manitoba may be included in further published versions, and publication in MSpace must be disclosed to publishers during the submission process.

Notes:

Patents – Refer to "Policy of Withholding Theses Pending Patent Applications (p. 115)" in this Guide.

Restriction of Thesis/Practicum for Publication – In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to two (2) years after submission of the digital version of a thesis or practicum to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted based on the request. One additional year of restriction can be requested if needed.

A thesis/practicum cannot be permanently restricted on the University's MSpace repository. It can only be restricted under the above embargo periods of two years plus one additional year.

Library and Archives Canada – Library and Archives Canada obtains a copy of the thesis via the University's MSpace repository.

Course-based, Major Research Paper, or Comprehensive Examination Route

Students must demonstrate their mastery of their field. The specific procedures for evaluation of this mastery are stated in individual department/unit supplementary regulations.

In those departments/units where comprehensive examinations are required, students should consult the department's/unit's supplementary regulations for specific requirements.

The results of the comprehensive examinations shall be submitted to the Faculty of Graduate Studies on the "Report on Comprehensive Examination (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form as either "Pass" or "Fail." No student may attempt a comprehensive examination more than twice. Any student who receives a "Fail" on the comprehensive examination twice will be Required to Withdraw from the Faculty of Graduate Studies.

Final Requirements and Deadlines for Graduation

The student will be recommended for the Master's degree providing that all degree requirements have been satisfied. In addition, the Faculty of Graduate Studies must receive:

For the Thesis/Practicum:

- the final report on the thesis/practicum; and
- the final (corrected and advisor-/advisory committee-approved) version of the thesis/practicum uploaded to MSpace.

For the Comprehensive Examination/M.Eng project/Design Thesis:

- the final report form

The final requirements of the degree must be submitted to the Faculty of Graduate Studies by the appropriate deadline. For those programs that do not have a GRAD course associated with their culminating exercise, the department/unit must forward a list of names of their potential graduands to the Faculty of Graduate Studies by the deadline published on the Faculty of Graduate Studies (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/#submitting-your-thesis-to-committee-members) website.

Doctor of Philosophy General Regulations

The degree of Doctor of Philosophy (Ph.D.) is granted only upon evidence of general proficiency and of distinctive achievement in a special field. In particular, the candidate must demonstrate an ability for independent investigation, original research or creative scholarship. This is expected to be presented in a thesis with a degree of literary skill and by an oral examination wherein the candidate exhibits mastery of their field. The Ph.D. is a research degree and is not conferred by The University of Manitoba solely as a result of coursework study.

Admission

General Criteria

Usually, the completion of a Master's degree or equivalent from a recognized university and a cumulative GPA of 3.0 on a 4.5 scale or equivalent in the last two (2) years of full-time university study (60 credit hours) is the minimum requirement for admission to the Ph.D. program.

Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission. Some departments/units require completion of a thesis-based Master's program prior to admission to a Ph.D. program.

Direct Admission from the Bachelor's Honours or Equivalent

With special recommendation of the department/unit, applicants without a Master's degree who have an honours Bachelor's degree or equivalent may be considered for entry to the Ph.D. program. These students must be outstanding in their academic background (GPA well above 3.0 in the last two (2) full years (60 credit hours) of undergraduate study).

Once admitted, these students must complete at least 24 credit hours of coursework (unless otherwise specified in the department's/unit's approved supplementary regulations) and will be assessed Ph.D. program fees for three (3) years. A minimum of 18 credit hours at the 7000-level or higher is required. Any further coursework beyond the minimum 18 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.

Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

Transfer from the Master's to the Ph.D. Program

Students who have not completed a Master's program may transfer to the Ph.D. program within the same department/unit upon the recommendation by the Department/Unit Head to the Faculty of Graduate Studies. The recommendation should be made within four (4) terms from the start of the Master's program. Fees paid, coursework completed, and time spent in the Master's program will usually be applied towards the Ph.D. program. Students must complete at least 24 credit hours of coursework unless the individual department/unit's approved supplementary regulations specify otherwise. A minimum of 18 credit hours at the 7000-level or higher is required. Any further coursework beyond the minimum 18 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.

The request to transfer from a Master's to the Ph.D. program must be submitted to the Faculty of Graduate Studies via the Faculty's admission application at least one (1) month prior to the term for which the student intends to start the Ph.D. program. The applicant must indicate a request for transfer in their application.

The student will be admitted to a 3-year Ph.D. program and will pay a total of three years of program fees, including program (but not differential) fees paid in the Master's at the time of transfer. Students are cautioned that such transfers may impact the duration of The University of Manitoba Graduate Fellowship and may have implications for other funding.

Students who have previously completed a recognized Master's degree and are initially admitted and registered in a Master's program may transfer to the Ph.D. program within the same department/unit on the recommendation of the student's advisor/co-advisor and Department/Unit Head. Where a student holds a Master's degree that would be sufficient for admission to the Ph.D. program, students must complete at least 12 credit hours of coursework, unless the individual department's/unit's approved supplementary regulations specify otherwise. The student will be admitted to a 2-year Ph.D. program and will pay a total of two years of program fees, including program (but not differential) fees paid in the Master's at the time of transfer.

Provisional Admission to the Ph.D.

Students nearing the completion of the Master's degree may be accepted provisionally to the Ph.D. program for a 12-month period commencing with the first registration in the Ph.D. program. Further registration in the Ph.D. program is contingent upon completion of all requirements of the Master's degree within the 12 months. Students must maintain continuous registration in their Master's program until its completion. Students will require assistance from the department/unit and the Faculty of Graduate Studies to complete dual registration on the "Concurrent Curriculum Permission (https://umanitoba.ca/graduate-studies/forms/)" form in the Master's and Ph.D. program simultaneously.

Student's Advisor, Co-advisor and Advisory Committee

Student's Advisor

Every Ph.D. student must have an advisor throughout their program, who is recommended to the Faculty of Graduate Studies by the Department/Unit Head. The advisor is responsible for supervising the student's graduate program. The advisor is the student's primary point of contact at the University of Manitoba and must be familiar with the general policies and regulations of the Faculty of Graduate Studies as well as the specific supplementary regulations of their academic department/unit. In this capacity, the advisor assists the student in planning the graduate program and ensures that the student is aware of all graduate program requirements, degree regulations, and general regulations of the academic department/unit, the Faculty of Graduate Studies, the university, and external funding agencies. The advisor provides counsel for all aspects of the graduate program, and stays informed of the student's scholarly activities and progress. The student's advisor also acts as a channel of communication to the student's advisory committee, the department/unit and the Faculty of Graduate Studies.

The advisor must:

- hold an appointment in the student's department/unit.
- be a member of the Faculty of Graduate Studies[1];
- hold a Ph.D. or equivalent[2];
- be active in their field of research; and
- have expertise in a discipline related to the student's program.

[1] See https://umanitoba.ca/graduate-studies/graduate-studies-administration (https://umanitoba.ca/graduate-studies/graduate-studies-administration/) for details.

[2] Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential advisor's demonstrated research record and current research activities. Note that M.D., D.M.D., Pharm.D. and J.D. are undergraduate degrees and are not equivalent to a Ph.D.

Usually, the student and the advisor choose to work together by mutual agreement. In departments/units where the choice of thesis topic advisor is postponed for some time after entry into the program, the Head of the department/unit or designate shall appoint a faculty member to advise the student as to the rules and regulations and on program and course requirements. This interim period must not exceed eighteen (18) months after entry into the program before a permanent advisor is chosen.

Student's Co-advisor

In special circumstances, upon approval of the Head of the department/unit, an advisor and a maximum of one (1) co-advisor may advise a student. The co-advisor must:

- be a member of the Faculty of Graduate Studies[1];
- hold a Ph.D. or equivalent[2];
- be active in research; and
- have expertise in a discipline related to the student's program.

[1] See https://umanitoba.ca/graduate-studies/graduate-studies-administration (https://umanitoba.ca/graduate-studies/graduate-studies-administration/) for details.

[2] Equivalency will be approved by the Dean of the Faculty of Graduate Studies and determined on a case-by-case basis and assessed by the potential co-advisor's demonstrated research record and current research activities. Note that M.D., D.M.D. and J.D. are undergraduate degrees and are not equivalent to a Ph.D.

The co-advisor may be identified either at the beginning of, or midway through, a student's program. In all instances, the Faculty of Graduate Studies must be informed of, and approve, the co-advisor arrangement. If a co-advisor is added midway through the student's program, a new Advisor-Student Guidelines must be completed. When an advisor and co-advisor are assigned, together they fulfill the role of the advisor (that is, neither fulfills any other advisory or examining committee membership requirements for that student). One (1) advisor must be identified as the primary advisor. The advisor and co-advisor share a single vote in matters regarding student progress and performance. Both the advisor and co-advisor's signatures are required on all documents where the advisor's signature is required.

Student's Advisor/Co-advisor

A student who also holds an appointment at the University of Manitoba as a member of the academic staff with faculty rank cannot have an advisor or co-advisor with an appointment in the same department/unit.

The advisor, co-advisor (if applicable) and student must discuss and complete the Faculty of Graduate Studies Advisor-Student Guidelines prior to the commencement of any research and no later than the submission of the first Progress Report for the student. If a student does not have an advisor/co-advisor, the interim advisor* will be required to complete the Advisor-Student Guidelines. If the parties cannot agree on any component(s) of the Advisor-Student Guidelines, the matter should be referred to the Department/Unit Graduate Chair, the Department/Unit Head, or the Dean of the Faculty of Graduate Studies. A new Advisor-Student Guidelines is to be completed if there is a change in advisor/

co-advisor or when a co-advisor is added midway through the student's program.

Should, during the student's program, the relationship between the student and advisor/co-advisor significantly deteriorate, the matter should be referred sequentially to the Department/Unit Graduate Chair, the Department/Unit Head, then to the Dean of the Faculty of Graduate Studies. It is the responsibility of the department/unit offering the program in which the student is studying to arrange an alternate advisor/co-advisor if this is appropriate and necessary.

Departments/units who have difficulty finding an alternate advisor need to consult with the Associate Dean working with the department/unit in the Faculty of Graduate Studies for support to pursue all reasonable options given the theoretical and research expertise required of an advisor in relation to the thesis/practicum. If an advisor cannot be secured within one term, the student cannot remain in their program.

* In departments/units where the choice of thesis/ topic and thesis/ advisor are postponed after a student's entry into the program, the Department/Unit Head, within one (1) term, shall appoint a faculty member to advise the student in the interim period before the regular advisor is assigned or chosen.

All students should consult department/unit supplementary regulations for specific details regarding advisor/co-advisor requirements.

Advisory Committee

The Department/Unit Head is responsible for recommending the advisory committee for each Ph.D. student. Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during their program. The advisor/co-advisor is the Chair of the advisory committee

The advisory committee must consist of a minimum of three (3) voting members (including the advisor/co-advisor as a single member sharing a single vote), all of whom must be members of the Faculty of Graduate Studies (https://umanitoba.ca/graduate-studies/graduate-studies-administration/). It is expected that advisory committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies or designate.

In addition, individuals who are not a member of the Faculty of Graduate Studies, and who do not hold a Ph.D. degree or equivalent, but who possess specific and extensive expertise and experience, such as professionals, artists, Knowledge Keepers or Elders, may serve on the advisory committee as a full voting member. No more than one such knowledge expert may serve on any individual advisory committee and must be nominated by the Department/Unit Head or Graduate Chair with a justification of their role and be approved by the Dean of the Faculty of Graduate Studies or designate. Advisory committees may alternatively include one (1) non-voting invited member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies. Committees may include a Knowledge Expert or invited member, not both.

Under no circumstances should graduate students, Post-Doctoral Fellows, and Research Assistants or Associates serve on graduate student advisory committees, regardless if they hold a rank of Adjunct Professor.

The composition of, and any changes to, the advisory committee, including the advisor/co-advisor, must be approved by the Faculty of Graduate Studies on the "Program of Study and Appointment of Advisory Committee (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form.

Advisory committee meetings must be held at least annually and are not intended to take the place of meetings between the student and advisor/co-advisor which should occur with much greater frequency than the advisory committee meetings.

Conflict of Interest

There are several circumstances that might lead to a real, perceived or potential Conflict of Interest (COI) in advisory and examining committees. A real COI could be present due to the existence of a (past or present) personal relationship that is romantic, sexual, marital, personal or familial. There is a potential for a perceived COI in cases of recent (within the last 5 years) collaboration among committee members, which may result in the perception of a lack of fairness or impartiality. These examples are not intended to be comprehensive, and are provided solely for illustration. The University of Manitoba Conflict of Interest Policy (https://umanitoba.ca/admin/governance/governing_documents/community/248.html) and Conflict of Interest Procedures (https://umanitoba.ca/admin/governance/governing_documents/community/962.html) as well as the Conflict of Interest Between Evaluators and Students due to Close Personal Relationships (https://umanitoba.ca/admin/governance/governing_documents/students/277.html) should also be consulted.

In addition to following the processes outlined in the above policies, COIs that exist within advisory and examining committees and proposed mitigation should be declared in writing to the Faculty of Graduate Studies to provide transparency to all relevant parties (including the student, committee members, unit leadership, and the Faculty of Graduate Studies) at the time they arise. All reported conflicts will be reviewed by the Dean of the Faculty of Graduate Studies (or designate) and reported to the Vice President (Administration). If the conflict is deemed sufficiently significant and cannot be mitigated, a new committee may need to be struck. Committees should consider each year at the time of the progress report whether new conflicts of interest have arisen since the prior year.

It is the student's role to inform FGS of any changes in their student registration or employment status that may be perceived as a COI. For example, if a student is hired as an Instructor or an Assistant Professor into any unit at the university, they are to inform FGS of their employment status change in order to have a dialogue to address potential COIs.

Program of Study

As soon as possible, but no later than 24 months after a student has commenced their program, the student's program of study should be registered with the Faculty of Graduate Studies on the "Program of Study and Appointment of Advisory Committee (https://umanitoba.ca/graduate-studies/forms/)" form and should include:

- information about the minimum or expected time for completion of the degree;
- coursework to be taken along with course classification ("S", "X", "A" or "O");
- any additional language requirement;
- the research area in which the thesis will be written.

The approval of the student's advisor/co-advisor and the Head of the department/unit are sufficient for registration. The program of study,

including withdrawal from individual courses and any subsequent changes, must be approved by the student's advisor/co-advisor, the advisory committee, and the Head or Graduate Chair of the department/unit. Withdrawal from courses or changes of course category without such approval may result in the student being Required to Withdraw from the Faculty of Graduate Studies.

Program Requirements

All students must complete one of the following programs of study for the Ph.D. degree, unless otherwise specified in the approved department/unit supplementary regulations:

- Where admission to the Ph.D. is directly from a Master's degree, a minimum of 12 credit hours at the 7000-level or higher plus a thesis is required. Any further coursework beyond the minimum 12 credit hours at the 7000-level must be at the 3000-level or above. A maximum of 24 credit hours of coursework is allowed toward the Ph.D. program.[1]
- Where admission to the Ph.D. is directly from an Honours Bachelor degree or equivalent, a minimum of 24 credit hours plus a thesis is required. The coursework must include a minimum of 18 credit hours at the 7000-level or higher with the balance of the coursework at the 3000-level or higher. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program program unless department's/unit's supplementary regulations indicate otherwise.

Language Requirements

Some departments/units specify a language requirement for the Ph.D. degree. Students are advised to consult department/unit supplementary regulations regarding this requirement.

Advance Credit

Advance credit for courses completed prior to admission to a Ph.D. program will be considered on a case-by-case basis. The student's department/unit makes the request to the Faculty of Graduate Studies by completing the "Advance Credit-Transfer of Courses (https://umanitoba.ca/graduate-studies/forms/)" form.

- Application for advance credit must be made within the first year of the program (please refer to Lapse or Expiration of Credit of Courses (p. 109))
- No more than 50% of the required coursework for the program can be achieved using advance credit.
- A course may not be used for credit toward more than one degree, diploma, micro-diploma or certificate.
- The student must register at the University of Manitoba for at least two consecutive terms and must also complete the thesis and candidacy examination at The University of Manitoba. Regardless of the extent of advance credit received, all students are required to pay applicable program fees.

Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at the University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot be used for credit towards another degree, diploma, micro-diploma or certificate;
- may not exceed 50% of the minimum credit hours of coursework required of the student's graduate program at The University of Manitoba.

Permission is granted in the form of a Letter of Permission (https://umanitoba.ca/registrar/letter-permission/) which may be obtained by making an application to the Registrar's Office; an official transcript, and course equivalency must be provided.

Lapse or Expiration of Credit of Courses

Courses completed more than seven (7) years prior to the date of awarding of a degree may not usually be used for credit toward that degree. A department/unit may request an exception to this limit on behalf of the student. Such requests, which will be evaluated on a case-by-case basis, must be submitted via the "Course Currency (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form and accompanied by supporting information including a detailed summary of the content of the course as taken initially and as offered most recently, and a detailed rationale explaining how the student has maintained knowledge of the course content. If the Faculty of Graduate Studies approves the course's currency, the approval will be valid for one (1) year. After one (1) year, an updated "Course Currency" form may be required.

Courses completed more than ten (10) years prior to the date of awarding of a degree are deemed expired and cannot be used for credit toward that degree.

In the event that coursework is no longer considered current or has expired, students must take additional course-work (as recommended by the Department/Unit Head, or designate, and as approved by the Dean of the Faculty of Graduate Studies) to meet the minimum credit hour requirements for their program. The department/unit may recommend that students re-take previously passed course(s) which have lapsed or expired.

Time in Program

The minimum time requirement for the program of study for a Ph.D. degree will usually be two (2) years of study beyond the level of the Master's degree, or three (3) years beyond the level of a Bachelor's degree.

The maximum time allowed for the completion of the Ph.D. degree is six (6) years following initial registration in the Ph.D. program. For those students who transfer from the Master's to the Ph.D., years spent in the Master's program are counted as years in the Ph.D. program.

Ph.D. students who are declared as part-time will receive an additional four (4) months in time to complete their program for every two (2) years (24 months) they are declared as part time (see Student Status/Categories of Students (p. 93)) to a maximum of seven (7) years.

Requests for extensions of time to complete the degree will be considered using the "Time Extension Request (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form submitted to the Dean of the Faculty of Graduate Studies at the beginning of the student's last term in program, prior to expiration of the respective maximum time limit. Time extension requests require an explanation of the need for the extension and the goals to be met during the extension period as well as a timeline for meeting the stated goals. Future extensions will be considered only if there is evidence progress

was made on the goals outlined in the previous extension request. If progress is not evident, the request must describe the circumstances that prevented progress on the identified goals. Extensions also must recognize the grad deadlines for the respective graduation period.

A student who has not completed the degree requirements within the time limit or within the time limit of any extension that has been granted (please refer to "Extension of Time to Complete Program of Study (p. 115)" and "Leaves of Absence (p. 115)") will be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

Academic Performance

Student progress shall be reported ***at least*** annually (but no more than once every four (4) months) to the Faculty of Graduate Studies on the "Progress Report (https://umanitoba.ca/graduate-studies/forms/)" form. Performance that remains "Satisfactory" throughout the year does not need to be reported to the Faculty of Graduate Studies more than annually, but should remain on file in the department/unit.

Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Graduate Chair and/or Department/Unit Head to the Dean of the Faculty of Graduate Studies on the "Progress Report" form. Students who receive two (2) consecutive "in need of improvement" or one (1) "unsatisfactory" rating will usually be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

Performance in Coursework

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies.

Performance Not Related to Coursework

Students may be Required to Withdraw from their Ph.D. program for reasons of unsatisfactory performance other than those related to failing grades. These include, but are not restricted to, unsatisfactory attendance and lack of progress in research and/or thesis preparation. Unsatisfactory performance must be reported to the Faculty of Graduate Studies on the "Progress Report (https://umanitoba.ca/graduate-studies/forms/)" form. Students who fail to maintain satisfactory performance may be Required to Withdraw on the recommendation of the Department/Unit Head to the Dean of the Faculty of Graduate Studies.

Students are usually expected to complete remedial action by the end of the subsequent term.

Academic Requirements for Graduation

All students must:

- maintain a minimum degree grade point average (DGPA) of 3.0 with no grade below C+;
- complete GRAD 7500
- complete GRAD 7300
- complete the Candidacy Examination (GRAD 8010);
- meet the minimum and not exceed the maximum course requirements; and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Individual departments/units may have additional specific requirements for graduation and students should consult department/unit supplementary regulations for these specific requirements. A degree grade point average of 3.0 or greater is required in those courses that constitute the program of study for graduation from the Faculty of Graduate Studies.

Candidacy Examination

The candidacy examination is a requirement of the Faculty of Graduate Studies and, as such, cannot be waived under any circumstances. However, the format and content of the candidacy exam varies from department/unit to department/unit. The purpose of the candidacy exam in doctoral programs is to determine the student's competence in the discipline with respect to understanding and absorbing a broad spectrum of material, and then researching, identifying, analyzing, synthesizing, and communicating ideas about that material in depth.

At the time specified by the advisory committee, usually within the first year after the completion of the Ph.D. program coursework, but in no case later than one year prior to expected graduation, the student must successfully complete the formal candidacy examination.

The examination is conducted according to a procedure established by the department/unit which is approved and documented in departmental/unit supplementary regulations. The department/unit supplementary regulations state the format and composition of the examination committee for the candidacy examination. The candidacy examination may be held virtually. If it is held in-person, it must be held at either The University of Manitoba Fort Garry or Bannatyne campus, or the St. Boniface Hospital Albrechtsen Research Centre usually during regular business hours. No recordings will be permitted.

This examination, which must be independent from the thesis proposal, may be oral, written, or both and may cover subjects relevant to the general area of the student's research. The structure of the exam must be made known to the student well in advance of the exam. In the case where there is a required oral component, the student must participate in-person or virtually.

A "pass" decision of the examiners must be unanimous. Students must be provided with feedback on their performance and access to the reasons for the pass/fail.

The Dean of the Faculty of Graduate Studies must be informed of the results of the examination via the "Report on Ph.D. Candidacy Examination (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form.

Any student who fails the candidacy examination twice will be Required to Withdraw from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

On successful completion of this examination, the student will be considered a candidate for the Ph.D. degree.

Thesis Proposal

Some departments/units have specific procedures in place for approval of thesis proposals and students are advised to refer to the specific department/unit supplementary regulations. The thesis proposal must be independent from the candidacy examination. No recordings will be permitted of the evaluation of the thesis proposal.

The proposed thesis research must be approved by the advisory committee and, if necessary, by the Human Research Ethics Board or Animal Care Committee before the work has begun on the thesis research or project.

Thesis

An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication. The thesis will usually be written in English but may be written in French. Departmental/Unit supplementary regulations may allow the thesis to be written in a language other than English or French. Committee members must be able to evaluate the thesis in the chosen language.

The thesis must be written according to a standard style acknowledged within the candidate's particular field of study and recommended by the department/unit, be lucid and well-written, and be reasonably free from errors of style and grammar (including typographical errors). Additional recommendations for a thesis are outlined in Thesis/Practicum Types (p. 120).

The final version of the thesis must be submitted by the candidate to the Faculty of Graduate Studies following the guidelines found on the Faculty's website. (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/)

Thesis Examination Procedures

The final examination for the Ph.D. degree proceeds in two (2) stages:

1. Examination of the candidate's thesis by the examining committee;
2. Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

Formation of the Examining Committee - University of Manitoba (Internal) Examiners

The candidate's advisor/co-advisor is considered to be a single voting member of the examining committee. All voting members of the advisory committee are expected to serve on the examining committee; any exceptions must be approved in advance by the Dean of the Faculty of Graduate Studies. All examiners must be members of the Faculty of Graduate Studies (https://umanitoba.ca/faculties/graduate_studies/governance/academic_membership.html). It is expected that examining committee members will have a Ph.D. degree or equivalent. Equivalency will be determined by the Dean of the Faculty of Graduate Studies.

Formation of the Examining Committee - External Examiner

The candidate's advisor/co-advisor, in consultation with the advisory committee, will recommend the names of at least three (3) distinguished scholars from outside The University of Manitoba with particular experience in the field of the thesis research and significant Ph.D. student supervisory/examination experience to serve as the external examiner. The external examiner provides an impartial arm's-length assessment of whether the thesis meets the standard of a PhD. The recommendations must be made to the Dean (or designate) of the Faculty of Graduate Studies for approval online and must include:

- A CV of each of the prospective external examiners;
- A short justification for the nomination that addresses:
  - The rationale behind the recommendations;
  - The prospective external examiners' qualifications (if not already explicit on the CV). This includes a current list of their scholarly publications and research activities and, importantly, their experience with Ph.D. student supervision/examination (e.g., Ph.D. students they have supervised to completion; Ph.D. students they are currently supervising; experience serving as external examiner for Ph.D. examining committees).

Advisors and/or departments/units **must** contact the prospective external examiners to obtain this information and determine if they are available to review the thesis prior to submitting the recommendations to the Faculty of Graduate Studies.

If any of the recommended examiners do not meet the criteria specified below, a detailed explanation must be included with the rationale for the recommendation.

The external examiner must:

- hold a Ph.D. (or equivalent);
- hold the rank of Associate Professor, Full Professor, Senior Scholar or Emeritus Professor (or the equivalent if outside North America) at a university, or have comparable expertise and standing if not a current faculty member at a university;
- have an established reputation in the area of the thesis research and be able to judge whether the thesis would be acceptable at an institution comparable to The University of Manitoba; and
- have a demonstrated record of supervising a significant number of Ph.D. students to completion, and significant recent experience with the supervision/examination of Ph.D. students.

The external examiner must not:

- have held any faculty appointment within the candidate's home department/unit at the University of Manitoba within the last ten (10) years;
- have acted as an external examiner for a student of the same Ph.D. advisor and/or co-advisor within the previous two (2) years;
- be a Postdoctoral Fellow;
- have been associated with the candidate at any time or in any significant way in the past five (5) years, present or reasonably foreseeable future (as advisor/co-advisor, colleague, teacher, co-author of published material, family member etc.); or
- be associated with the candidate's advisor/co-advisor in any of the following ways:
  - former student within the last ten (10) years;
  - research advisor/co-advisor within the last ten (10) years;
  - research collaborator within the last five (5) years;
  - co-author of published material within the last five (5) years.

The Dean of the Faculty of Graduate Studies or designate will choose the external examiner from the list provided by the candidate's advisor/co-advisor or department/unit and will extend a formal invitation to the

selected examiner. The Dean (or designate) of the Faculty of Graduate Studies shall ensure the anonymity of the external examiner until their report has been submitted. The identity of the selected examiner shall remain confidential until all reports on the thesis have been received.

Changes in the Examining Committee

The Dean of the Faculty of Graduate Studies must approve changes in the membership of the examining committee. No changes shall be made in the examining committee after the thesis is submitted to the Faculty of Graduate Studies.

Submission of the Thesis for Examination

Ph.D. candidates must submit their thesis for written examination electronically through the Faculty of Graduate Studies approved thesis examination process. Please refer to the website (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/) for pertinent instructions. It is the responsibility of the Faculty of Graduate Studies to distribute the electronic version of the thesis to all examiners once an external examiner has been secured. The Faculty of Graduate Studies shall ensure that the thesis is distributed to examiners as soon as possible after the submission of all required documentation. The Faculty of Graduate Studies website (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/submit-your-thesis-or-practicum/#submitting-your-thesis-to-committee-members) should be consulted regarding recommended dates by which theses must be submitted.

Once the thesis has been submitted to the Faculty of Graduate Studies, neither the candidate nor the advisor/co-advisor shall have any communication with the examining committee regarding the thesis. However, should the need arise, the examiners may contact the Dean of the Faculty of Graduate Studies to discuss any issues related to the thesis.

Responsibilities of the Examiners

The examiners are responsible for:

- ensuring that the thesis and the candidate meet recognized scholarly standards for a Ph.D.;
- appraising the underlying assumptions, methodology, findings, and scholarly significance of the findings of the thesis;
- ensuring that the thesis is organized, presents data and uses accepted conventions for addressing the scholarly literature in an acceptable manner;
- evaluating that the candidate has the ability to present their findings orally and demonstrate their scholarship by responding to questions and defending the thesis.

Notes:

1. Any potential breach of academic integrity must be reported to the Dean of the Faculty of Graduate Studies.
2. Any potential breach of The University of Manitoba's Responsible Conduct of Research Policy (https://umanitoba.ca/admin/governance/governing_documents/research/responsible_conduct_of_research.html) must be reported to the Office of the Vice President (Research and International).
3. Submission of previously published, peer-reviewed material in the thesis does not preclude its critical examination, either as a written document being reviewed by examiners or at the thesis oral examination.

Written Examination

Support of the candidate's advisor/co-advisor, advisory committee, and department/unit is required before the thesis is eligible for examination. Such support must be provided to the Faculty of Graduate Studies via the completed "Approval to Proceed to Examination (https://umanitoba.ca/graduate-studies/forms/)" form. In completing the "Approval to Proceed to Examination" form:

- each member of the advisory committee verifies that they have read the complete version of the thesis and have provided the candidate with a detailed review and comments including any necessary revisions in content and formatting (see Appendix 1);
- the student verifies that they have received feedback from all members of the advisory committee and have taken the feedback into account in preparing the thesis and are ready and willing to have their thesis examined; and
- the department/unit verifies that the student's thesis has been reviewed by all members of the advisory committee and that the department/unit fully supports the thesis proceeding for examination.

The thesis will be eligible for examination if support for proceeding to the written examination is provided by the department/unit and examining committee, with no more than one (1) member not in support, and if an external examiner has been secured by the Faculty of Graduate Studies.

The Dean of the Faculty of Graduate Studies will request the examiners to give, within four (4) weeks of the distribution of the thesis to the examining committee, a detailed report on the quality of the thesis. This is referred to as the "written examination" stage of the thesis examination process.

The examiners (including the knowledge expert, if applicable) will be asked to place the thesis into one of the following categories:

1. Pass: The thesis represents a distinct contribution to the candidate's field of research and is acceptable as it stands. Minor revisions to content, structure, or writing style may be required. The thesis may proceed to oral examination.
2. Pass: The thesis has merit and makes a contribution to the candidate's field; however, there are research-related concerns that have the potential to be addressed in the oral examination. The structure and writing style are acceptable or require only minor revisions. The thesis may proceed to oral examination.
3. Fail: The thesis has some merit but is not acceptable in its current state and requires major revisions to one or more of its core components, such as research content, structure or writing style. The thesis should not proceed to oral examination.
4. Fail: The thesis is unacceptable with respect to its core components, such as research content, structure, and writing style. The thesis should not proceed to oral examination.

The candidate's advisor (and, if appropriate, co-advisor) may also submit a report. Invited members may submit a report; however, as they serve in a non-voting capacity, they are not to categorize the thesis (i.e., evaluate its merit).

Results

The Dean of the Faculty of Graduate Studies shall provide electronic copies of all reports to each of the advisor/co-advisor, internal examiners, knowledge expert or invited member, Department/Unit Head and/or Graduate Chair and Department/Unit contact.

If either the external examiner **or** two (2) or more internal examiners indicate a failure (i.e., places the thesis in categories 3 or 4), then the candidate fails the written examination and cannot proceed to the oral examination. Otherwise, the written examination is deemed a "Pass" and the candidate may proceed to the oral examination. The awarding of a passing grade by an internal or external examiner does not preclude them from assigning a failing grade at a subsequent stage in the examination process.

In the event of a first failure, the candidate will be permitted a second attempt at the written examination, consisting of the evaluation of the thesis by the same examining committee. In exceptional circumstances, a new external examiner may need to be secured before an additional attempt may proceed. When notice of a failed examination is received, the Department/Unit Head shall convene a meeting of the internal examiners of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard. Usually, this will involve additional scholarly work and revisions to the written thesis that the Department/Unit Head will describe in writing to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies. Without this written description, the thesis will not be eligible for re-examination.

Support of the candidate's advisor/co-advisor, examining committee, and department/unit is required before the thesis is eligible for re-examination. Such support must be provided to the Faculty of Graduate Studies through via a new completed "Approval to Proceed to Examination" form, accompanied by a detailed summary of the changes made to improve the thesis. The thesis will be eligible for re-examination only after approval this is received by Faculty of Graduate Studies.

Two failures at any combination of written and/or oral examination stages will result in the candidate being withdrawn from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

Oral Examination

Please consult the Faculty of Graduate Studies website (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/phd-oral-examination/) for up-to-date and detailed guidelines for the conduct of Ph.D. Oral Examinations.

Scheduling

Departments/Units cannot proceed with scheduling the oral examination prior to receiving the approved internal and external examiners' reports from the Faculty of Graduate Studies. It is the responsibility of the Advisor and/or Department/Unit to contact the internal and external committee members to determine their availability and arrange a date for the examination.

The oral examination may be held in-person, remotely, or using a hybrid model. Any in-person participants must be hosted at either The University of Manitoba Fort Garry or Bannatyne campus or the St. Boniface Hospital Albrechtsen Research Centre, usually during regular business hours unless prior permission is granted by the Dean of FGS. It is the responsibility of the department/unit to provide the appropriate space and technology for their chosen delivery method(s) (i.e., room booking, ensuring that the chosen facilities meet minimum standards expected for a Ph.D. oral examination, determining the meeting platform to be used). The advisor or department/unit must inform the Faculty of Graduate Studies of the following information no later than two (2) weeks (10 working days) prior to the date of the examination:

- Examination details:
  - The date and time of the examination (Central time);
  - The method of delivery (i.e., in-person, remote, or hybrid);
  - The location and/or virtual meeting platform to be used; and
  - Whether the external examiner and invited member (if applicable) will attend.
- Chair details:
  - Full name;
  - Email address;
  - Department/Unit; and
  - Method of attendance.

In addition, the candidate must submit biographical information/CV and an abstract, not to exceed 350 words, of the thesis to the Faculty of Graduate Studies at least two (2) weeks (10 working days) in advance of the date of the oral examination.

An eligible chair must be secured before the examination details listed above may be submitted to the Faculty of Graduate Studies. If the department/unit and/or advisor/co-advisor encounter difficulties in securing a chair, they should contact the Faculty of Graduate Studies for assistance. The method of delivery (i.e., in-person, virtual, or hybrid) must be disclosed to prospective chairs. Chairs should attend in the same manner as the candidate (e.g., for hybrid examinations, the chair should participate in-person only if the candidate also participates in-person). Prospective chairs must:

- Be members of the Faculty of Graduate Studies;
- Hold a rank of Assistant Professor or above; and
- Not hold an appointment, including nil-salaried appointments (e.g., Adjunct) in any unit represented by the advisor and co-advisor.

Attendance

The Dean of the Faculty of Graduate Studies or designate shall act as Chair of the oral examination proceedings. The Faculty of Graduate Studies will provide the Chair with an electronic package of documents and forms one week before the examination is scheduled to take place.

The attendance of the external examiner at the candidate's oral examination is strongly encouraged. If the external examiner cannot participate, they will be asked to provide questions in advance. These questions will be read to the candidate at the oral examination by the Chair.

It is expected that all internal members of the examining committee, including the Knowledge Expert (if applicable), be present in real time at the oral examination. Under exceptional circumstances, and with the prior approval of the Dean of the Faculty of Graduate Studies, one (1) member may be absent from the proceedings.

The candidate and advisor/co-advisor must be present in real time for the examination.

Usually, the oral examination shall be open to all members of The University of Manitoba community and the general public. In exceptional cases the final oral examination may be closed; for example, when the results of the thesis research must be kept confidential. In such cases, the examination committee and Department/Unit Head shall request prior approval in writing from the Dean of the Faculty of Graduate Studies.

If approved, the final oral examination shall be closed to all but the examining committee and the Dean of the Faculty of Graduate Studies or designate.

Regardless of open or closed status and method of delivery, no recordings will be permitted.

Format of the Examination

The first part of the oral examination shall consist of an oral presentation by the candidate. This is followed by examination of the candidate by the examination committee (i.e., a question-and-answer period). If time permits, the Chair, at their discretion, may allow questions from the invited member (if applicable) of the examining committee and then members of the audience.

Procedures for the Conduct of the Examination

The Chair should discuss the examination procedures with the examiners prior to the beginning of the formal examination.

The Chair will introduce the candidate and request them to give a concise (20 to 25 minute) oral presentation of the thesis to include a summary of the problem addressed, the results obtained, and the conclusions drawn from the study.

Following the presentation, the Chair will invite questions from each member of the examining committee, taking care to ensure that each examiner has approximately equal time for questions. The total time for questions by the examining committee must not exceed two (2) hours.

The Chair may exercise their discretion in allowing questions from the audience following completion of the formal examination. Once assuming the role of Chair, they forego the right to comment on the merits of the thesis regardless of whether they are an expert in the field.

Decision of the Committee

Following completion of the formal examination, the candidate, invited member (if applicable) of the examining committee and audience must leave the examination room or virtual meeting for the committee's *in-camera* discussion and final evaluation. The decision of the examining committee will be based on the content of the thesis, the candidate's ability to defend their work, and the candidate's ability to accurately respond to questions posed by the examining committee. The performance of the candidate at the oral examination may reveal problems of comprehension or explanation, and the examining committee may require revisions be made to the written thesis to address these problems prior to granting final approval. Each examiner is expected to comment on the candidate's performance and vote in favour of assigning either a pass or fail grade for the examination. Co-advisors share a single vote.

The judgement of the examiners shall be reported by the Chair to the Faculty of Graduate Studies in the qualitative terms "pass" or "fail" on the Final Examination of the Ph.D. Thesis Chair Report Form. Each examiner must also indicate their vote on the Final Examination of the Ph.D. Thesis Approval Form, which will be submitted to the Faculty by the Advisor once all required revisions have been made.

- **Pass**: the candidate has satisfactorily presented the thesis rationale, methodology, findings, and conclusions to the general satisfaction of the examining committee. Notwithstanding this, stylistic, grammatical, and content revisions to the thesis may be required. Usually, the advisor/co-advisor is charged with ensuring that any revisions are satisfactorily completed. Under some circumstances, the entire examining committee may wish to ensure any required revisions are completed satisfactorily. Regardless, those examiners in agreement must indicate, by their signatures, concurrence with the passing grade.
- **Fail**: the candidate has failed to adequately orally present the thesis rationale, methodology, findings, and/or conclusions, or to satisfactorily respond to questions posed related to the thesis. Failure may also arise because of defects in conception, methodology, or context. Those examiners in agreement must indicate, by their signature, concurrence with the failing grade.

If either the external examiner **or** two (2) or more internal examiners indicate a failure, then the candidate fails the examination.

In the case of a first failure of the oral examination, the candidate will be allowed to undergo a second examination attempt, provided the thesis has not already received a failure at the written examination stage. In this case, the Department/Unit Head shall convene a meeting of the internal members of the examining committee and the student's advisor/co-advisor to decide how to bring the thesis to an acceptable scholarly standard and/or prepare for the second oral examination. Usually, this will involve additional scholarly work which the Department/Unit Head will describe, in writing, to the advisor/co-advisor, the candidate, and the Dean of the Faculty of Graduate Studies.

Eligibility for re-examination must be communicated to the Faculty of Graduate Studies via the submission by the Department/Unit Head of a new completed "Approval to Proceed to Examination (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form, accompanied by a detailed summary of the changes made to improve the thesis, if any. Once all required materials are received, the summary of revisions and a copy of the revised thesis (if applicable) will be provided to the examining committee for review in anticipation of a second oral examination attempt.

Note: In some circumstances, the candidate may revise the written thesis. The revised thesis will be provided to the committee prior to the next oral examination. The revised written thesis shall not be re-examined (i.e., examiners are not to assign a category or provide a report on the revised thesis); however, further revisions can be recommended at the oral examination.

Two failures at any combination of written and/or oral examination stages will result in the candidate being withdrawn from the Faculty of Graduate Studies and the notation on the student record will be "Required to Withdraw".

Graduation

The candidate will be recommended for the Ph.D. degree providing that all degree requirements have been satisfied, and upon receipt by the Faculty of Graduate Studies:

- Passing reports by the thesis examining committee;
- The completed Final Examination of the Ph.D. Thesis Chair Report and Approval forms; and
- The final (corrected) version of the thesis uploaded digitally through MSpace, the University's institutional repository.

The final requirements of the degree must be submitted to the Faculty of Graduate Studies by the appropriate deadline. The deadline for each graduation period is published on the Faculty of Graduate Studies website (https://umanitoba.ca/graduate-studies/student-

experience/thesis-and-practicum/submit-your-thesis-or-practicum/#submitting-your-thesis-to-committee-members).

Patents – Refer to "Policy of Withholding Theses Pending Patent Applications (p. 115)".

Restriction of Theses for Publication – In exceptional cases, not covered by the regulation concerning patents, where adequate cause can be shown to delay publication, the student and advisor/co-advisor may request in writing that the Dean of the Faculty of Graduate Studies restrict access for a period up to two (2) years after the submission of the digital version of a thesis to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted based on the request. One additional year of restriction can be requested if needed.

A thesis cannot be permanently restricted on the University's MSpace repository. It can only be restricted under the above embargo periods of two years plus one additional year.

Library and Archives Canada – Library and Archives Canada obtains a copy of the thesis via the University's MSpace repository.

Student Withdrawal

A student will be Required to Withdraw when the Ph.D. thesis has been rejected twice at the stage where:

1. The internal examining committee reports on the merits of the written thesis;
2. The external examiner reports on the merits of the written thesis;
3. The oral examination; or
4. A combination of any of these stages.

Policy of Withholding Thesis Pending a Patent Application Content or Manuscript Submission

In 1970, The University of Manitoba Board of Governors and Senate approved a policy on accepting research grants from outside agencies. This policy defined the right of agencies to defer release of information and thus ensure freedom of publications for research findings of University personnel. Occasionally, the University may also wish to restrict the release of a thesis pending patent application. For additional details, see The University of Manitoba Governing website. (https://umanitoba.ca/governance/governing-documents/#academic)

This situation may arise in the two (2) circumstances defined below, both of which are governed by the same set of regulations:

1. Where a research project is known to contain patentable items as defined in the research contract, then it is the responsibility of the advisor/co-advisor to give information of the restrictions on publication to the student prior to the start of the thesis research. If the student agrees to carry out the research, then the regulation given below will apply.
2. Where a patentable item is found during the course of research, then the advisor/co-advisor and the student may make application for patent rights through the University Patent Committee, and the following regulation will apply concerning the release of the thesis.

Regulations Concerning Release of a Thesis during Application and Negotiation for Patents

The Dean of the Faculty of Graduate Studies will receive the approved thesis. On joint request of the advisor/co-advisor and the student, the Dean will retain the thesis for a period up to two (2) years. One additional year may be requested. Requests beyond one additional year may be made to the Dean in exceptional cases.

Regulations Concerning Release of Thesis Pending Manuscript Submission

The Dean of the Faculty of Graduate Studies will receive the approved thesis. On joint request of the advisor and the student, the Dean will retain the thesis for a period up to two (2) years.

In exceptional cases, not covered by the regulation concerning patents, where adequate causes can be shown to delay publication, the student and advisor/co-advisor may request that the Dean of the Faculty of Graduate studies restrict access for a period up to two (2) years after submission of the digital version of a thesis or practicum to The University of Manitoba. The Dean shall determine for what period, if any, access will be restricted based on the request. One additional year of restriction can be requested if needed. Requests beyond one additional year may be made to the Dean in exceptional cases.

A thesis cannot be permanently restricted on the University's MSpace repository. It can only be restricted under the above embargo periods of two years plus one additional year.

Extension of Time to Complete Program of Study

The student must complete the "Time Extension Request (https://umanitoba.ca/graduate-studies/forms/)" form and submit it to their major department/unit for recommendation to the Faculty of Graduate Studies at the beginning of the student's last term in program, prior to expiration of the respective maximum time limit. Requests for an extension are reviewed by the Faculty of Graduate Studies on a case-by-case basis.

Requests for extension must be accompanied by a realistic detailed timeline that has been agreed to by the student and advisor/co-advisor and endorsed by the Department/Unit Head. The extension time requested must closely reflect the time required to complete the program.

The usual time granted for extensions is one to two terms on initial request. More than one (1) extension period may be granted, however If progress was not made on the outlined goals, the request must describe the circumstances that prevented the identified goals from being met. Requests for extensions must recognize the respective deadlines for the graduation period.

Leaves of Absence

A leave of absence request is a tool that can support students to prospectively seek a regular, exceptional or a parental leave. Leave requests are to be made prior to the start of an academic term or, in exceptional circumstances, during the term for which the leave is being requested. It is exceptionally rare that a leave for an already completed

term (i.e., a leave that is retroactively dated) will be approved and this will only be done when circumstances are exceptional. The time extension policy is an alternate tool that supports students who have unexpected circumstances that have negatively impacted their progress to an extent that the student needs additional time to complete their academic program. Leaves do not extend course currency or expiration timelines.

For International Graduate Students:
To determine how applying for a Leave of Absence may affect your immigration status with Immigration, Refugees and Citizenship Canada, please consult with an International Student Advisor at the International Centre (https://umanitoba.ca/international/) prior to completing your "Leave of Absence (https://umanitoba.ca/graduate-studies/forms/)" application with your department/unit.

Regular Leave

A regular leave is intended to allow students to meet responsibilities/plans related to family, travel or employment and circumstances not covered by the parental or exceptional leaves. At the student's request, the Department/Unit Head may recommend to the Dean of the Faculty of Graduate Studies that a student be granted a leave of absence for a period of time not to exceed one (1) year. While on a regular leave of absence, a student must not be actively engaged in their program of study or thesis/practicum research work. A student on a regular leave of absence is required to maintain continuous registration. A student on a regular leave of absence will not be assessed program fees, if any are owing, during the period of the leave; however, the appropriate continuing fee will be assessed.[1] Any program fees deferred as a result of a regular leave will be assessed when the student returns from leave. A regular leave of absence status does not extend time limits to complete program of study as outlined in Faculty of Graduate Studies regulations.

Note: At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.

[1] **Program Fees:** The continuing fee in effect at the time of the granting of the leave will be levied. However, if the student returns from leave in January, the normal tuition fee will be levied less the continuing fee already paid (as determined by the Registrar's Office).

All applications for Leaves of Absence must be submitted on the "Leave of Absence (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form.

Exceptional Leave

In exceptional circumstances for medical or compassionate reasons (e.g. the need to care for an ailing family member), at the request of the student, the Head of the department/unit may recommend to the Dean of the Faculty of Graduate Studies that a student be granted an exceptional leave of absence for an initial period of time not to exceed one (1) year. Supplemental documentation must support the requested dates of the leave. Exceptional leave dates must correspond with the start and end of (an) academic term(s). Students whose leave does not align with the academic term should consult with the Faculty of Graduate Studies Associate Dean overseeing the program for additional support. It is exceptionally rare that a leave for an already completed term (i.e., a leave that is retroactively dated) will be approved and this will only be done when circumstances are exceptional.

While on an exceptional leave of absence, a student is not permitted to be engaged in their program of study or thesis/practicum work, and is not required to maintain continuous registration or pay tuition fees. In addition, the leave period would not be included in the time period allowed for the completion of the degree. This leave does not cover circumstances related to travel, employment or financial concerns.

Note: At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.
Program Fees: Students are not expected to pay fees for the term in which they have been granted an exceptional leave. Upon return from the exceptional leave, students will be assessed fees as determined by the Registrar's Office.

All applications for Leaves of Absence must be submitted on the "Leave of Absence (https://umanitoba.ca/graduate-studies/forms/#masters-phd-and-other-program-forms)" form.

Parental Leave

A graduate student who is expecting a child or who has primary responsibility for the care of an infant or young child immediately following a birth or adoption of a child is eligible for parental leave. The request for a parental leave should be made through the department/unit, to the Faculty of Graduate Studies for a period of time usually not to exceed one (1) year. Supplemental documentation must be submitted to support the requested dates of the leave. Parental leave dates must correspond with the start and end of (an) academic term(s). Students whose leave does not align with the academic term should consult with the Faculty of Graduate Studies Associate Dean overseeing the program for additional support. While on leave of absence for parental reasons, a student must not be actively engaged in their program of study or thesis/practicum work. The leave period is not included in the time period allowed for completion of the degree..

Note: At the time of approval of an application for leave, the procedures for the return of the student to the department/unit at the completion of the leave must be stipulated.
Program Fees: Students are not expected to pay fees for the term(s) in which they have been granted a parental leave. Upon return from the parental leave students will be assessed fees as determined by the Registrar's Office.

All applications for Leaves of Absence must be submitted on the "Leave of Absence (https://umanitoba.ca/graduate-studies/forms/)" form.

Awards and Leave of Absence

Students granted an exceptional leave will retain the full value of a University of Manitoba Graduate Fellowship or other award whose terms and conditions are established by the Faculty of Graduate Studies. Such an award will be suspended at the onset of the leave and reinstated at the termination of the leave period (4 to 12 months) provided that the student returns to full time study at that time. Students granted an approved parental leave will have their UMGF extended for the time of the parental leave, not to exceed one year. The UMGF Award Holder's Guide is available on the Faculty of Graduate Studies website (https://umanitoba.ca/graduate-studies/forms/#funding-awards-and-financial-aid).

Note: Other awards will be paid according to the conditions established by the donor or granting agency.

Graduate Student Vacation Entitlement

Students are entitled to 21 calendar days of vacation over a twelve (12) month period.

For the purposes of calculating vacation entitlement, the academic year means the period from September 1 to August 31.

Vacation entitlement will be prorated for the portion of the year in which a student is registered.

Any vacation time taken during an official closure of the University is not included as part of the 21 calendar day vacation entitlement. In addition, attendance at academic conferences shall not be considered vacation time.

Student vacation requests should have minimal impact on the student's research, coursework, and other obligations to the University. Any requests provided ahead of time and within these guidelines will not be unreasonably denied.

Should a conflict arise between a student's vacation request and a supervisor's expectations, the Department/Unit Head (or designate) shall make a final determination.

Appeals – Procedures and Guidelines

General

Students who disagree with a decision have access to appeal routes as laid out by various Faculty of Graduate Studies and University of Manitoba appeal procedures. Student appeals may be limited by the scope of the inquiry available at each level and category of appeal, as well as by the time restrictions for submission of appeals. In all cases, students are encouraged to work with a Student Advocate and make use of other available supports as needed when considering and/or pursuing the appeals process.

A further limitation is that the Faculty of Graduate Studies rules and regulations, established to uphold the academic rigour of the University of Manitoba, are generally not subject to appeal unless an appeal route is otherwise stipulated. In situations where no formal appeal route is available, a student may make a request to the Dean of the Faculty of Graduate Studies. Requests falling outside the scope of an appeal process are not appealable to a subsequent higher authority.

Students are referred to the appeals section of the University of Manitoba Governing Documents (https://umanitoba.ca/governance/governing-documents/) for further details.

For students registered in Joint Master's Programs (University of Manitoba and University of Winnipeg), there is a different process for handling academic and disciplinary appeals cases than is used for University of Manitoba students in regular programs (not Joint Programs). This process is outlined in the Joint Master's Program Governing Regulations (https://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2021-03/jmp-regulations-2017.pdf).

Definitions

- "Academic Decisions" – decisions pertaining to student academic performance and/or progress in a program of study that are not disciplinary in nature.
- "Appellant" – the graduate student appealing a decision affecting the student's own admission to, academic standing in, awards from or disciplinary action by a department/unit or the Faculty of Graduate Studies;
- "Appeal Hearing"" (or "Hearing") – a meeting of the Appeal Panel, Appellant, and Respondent(s) that involves oral and/or written testimony and results in a decision on the outcome of the appeal.
- "Appeal Panel" – a group convened from the members of the Faculty of Graduate Studies Appeals Committee empowered to assess and issue decisions on appeals stemming from decisions of departments/units or the Faculty of Graduate Studies, or individuals designated to make such decisions.
- "Respondent" – a representative of the Faculty of Graduate Studies designated by the Dean of the Faculty of Graduate Studies to represent the Faculty of Graduate Studies in an appeal response or hearing. In this document, "Respondent" may also refer to a "Co-respondent" invited by the Respondent to represent the department/unit unless otherwise noted.
- "Unit" – the department/unit, office, or administrative body (excluding the faculty of Graduate Studies) whose decision is being appealed. This is understood to include decisions taken by individuals or committees acting in the name of the department/unit and also to the supplementary regulations pertinent to a department/unit's operation which have been approved by the Faculty of Graduate Studies.

Types of Appeal

Several areas of appeal are available to appellants:

- admission;
- academic;
- discipline;
- other (e.g., fee, term work and final grade appeals).

In all cases, appeals should be addressed to the Dean of the Faculty of Graduate Studies. Appeals of decisions made by the Dean will be referred to an Appeal Panel of the FGS Appeals Committee. A decision of the Faculty of Graduate Studies Appeal Panel is appealable only to the Senate Committee on Appeals or the University Discipline Committee, as appropriate. In all cases, an appellant shall have the option of being registered in, and undertaking the responsibilities of, their program, until such time as they have exhausted the university appeal process or the appellant decides not to appeal further, whichever comes first.

A flow chart of the University of Manitoba Appeals Processes is available at this link (https://umanitoba.ca/sites/default/files/2020-04/appeal-procedures-for-students.pdf).

Admission Appeals

Please refer to University of Manitoba Governing Documents: Students: Policy: Admission Appeals Procedures and Guidelines (https://umanitoba.ca/governance/governing-documents-students/#senate-committee-on-admission-appeals).

Academic Appeals

Academic Appeals are appeals concerning academic decisions made by the department/unit and/or the Faculty of Graduate Studies.

Appeal Considerations

The Faculty of Graduate Studies will consider appeals:

- stemming from a decision of a department/unit on academic matters (e.g. first failure of a candidacy examination) only after they have been addressed via the appropriate department/unit-level appeal process (if any), as is outlined in the department/unit supplementary regulations;
- stemming from a decision of the Faculty of Graduate Studies (e.g. Required to Withdraw) which may follow the recommendation of a department/unit.
- stemming from a negative decision from the Registrar's Office on a final grade or term work grade appeal.

In all cases, appeals should be addressed to the Dean of the Faculty of Graduate Studies.

A decision of the Appeal Panel is appealable only to the Senate Committee on Appeals (https://umanitoba.ca/governance/governing-documents-students/#senate-committee-on-appeals).

Composition of an Appeal Panel

Faculty members or students are disqualified from participating on an Appeal Panel if they:

- hold any academic appointment in the department/unit in which the appellant is registered;
- are/were a student in the department/unit in which the appellant is registered;
- were, as an individual, or as a member of a committee or board, responsible for making the decision being appealed.

Note: All members of an Appeal Panel shall participate in all of the deliberations essential for the determination of the matter in dispute. If, in the course of hearing an appeal, a member is not present at the commencement of the hearing or a member cannot continue, the Panel may elect to proceed in the absence of that member. If more than one (1) member is not present at the commencement or cannot continue, the Appeal Panel must adjourn the proceedings.

Grounds for an Academic Appeal

It shall be the responsibility of the appellant to indicate clearly and specifically the grounds warranting consideration of the appeal and to provide all relevant information and documented evidence that should be considered in the adjudication of the appeal.

The Appeal Panel shall only consider an appeal if there is evidence that:

- the department/unit or the Faculty of Graduate Studies failed to follow the rules of natural justice*;
- the department/unit or the Faculty of Graduate Studies failed to follow procedures;
- a department/unit or Faculty of Graduate Studies regulation has been unfairly or improperly applied, or has become inapplicable through lapse of time;
- there are documented mitigating circumstances (e.g., medical, compassionate);
- there is apparent conflict between a Senate Regulation, a Faculty of Graduate Studies policy and/or a department/unit regulation.

*The Supreme Court of Canada defines "natural justice" in its simplest form as "fair play in action"; in other words, "natural justice" describes the fairness of procedures and how they are executed (as opposed to whether procedures were followed). In the context of academic decisions and appeals, this includes but is not limited to:

- the right of the appellant to know that a matter is under consideration and the nature of the matter being considered (e.g., academic performance, appeal);
- the right of the appellant to know what evidence has been given and what statements have been made affecting them;
- the right of the appellant to be heard (i.e., to be able to respond to any statements and decisions that may affect them);
- the decision must be based on evidence and communicated clearly; and
- the decision maker must be free of bias and there must be no perception of bias.

Appeal of a Faculty of Graduate Studies Decision

A complete appeal of decisions made by any department/unit, committee, administrator (e.g., Associate Dean), or faculty member within the Faculty of Graduate Studies must be submitted in writing by the appellant to the Dean of the Faculty of Graduate Studies within fifteen (15) working days of the date that the appellant was informed in writing of the action to be appealed. This is considered a first-level appeal. The appellant will be informed of the outcome in writing.

Faculty of Graduate Studies Academic Appeals Process

Submission of Appeal Package

The Appellant must submit a complete appeal package consisting of an appeal form, a letter clearly explaining their grounds for appeal, a copy of the letter of decision from the previous appeal level, a copy of all the documentation submitted to the previous appeal level, if not a first-level appeal, and any relevant supporting documentation to the Faculty of Graduate Studies within fifteen (15) working days. Incomplete appeals may not be considered.

Upon receipt of a formal appeal, the Dean of the Faculty of Graduate Studies may, at their discretion, consider the appeal or forward it to an Appeal Panel. If the Dean considers the appeal, the student shall be informed of the outcome in writing. Otherwise, the appeal will be adjudicated by an Appeal Panel.

Faculty of Graduate Studies Appeals Committee

The appellant may appeal the Dean's decision to the Faculty of Graduate Studies Appeals Committee within fifteen (15) working days of the date of the letter of decision. This is considered a second-level appeal.

An Appeal Panel will be composed of members of the Appeals Committee. The Appeal Panel will determine whether the appeal falls within their jurisdiction and, if so, whether the appellant has sufficiently substantiated their identified grounds for appeal to warrant proceeding to a Hearing. If the Appeal Panel determines that the appellant has not substantiated their grounds for appeal, the matter will not proceed to a Hearing and the appellant and Dean of Graduate Studies will be notified in writing. If the Appeal Panel determines that the appellant has substantiated their grounds for appeal, the appellant and Dean of Graduate Studies will be notified and a Hearing scheduled.

If it is determined that the appeal will proceed to a hearing, the Appeal Panel may request additional information or request oral and/or written testimony from identified witnesses.

Hearing Procedures

The Faculty of Graduate Studies shall inform the appropriate Department/Unit Head (or designate) of the nature of the appeal and request that they accompany the Faculty of Graduate Studies respondent as a co-respondent at the Hearing. The co-respondent will be requested to provide a letter responding to the appeal no later than fifteen (15) working days before the date of the Hearing. The respondent will be requested to provide a letter addressed to the Chair of the Appeal Panel no later than ten (10) working days prior to the hearing.

The appellant shall be advised by the Dean of the Faculty of Graduate Studies of the right to appear in person and/or to be represented by a student advocate, a fellow student, or other full-time member of the University community not receiving payment for appearing or working for legal aid. It is highly encouraged that the student be represented by a student advocate. Students who require specific accommodations to participate in a Hearing should advise the Faculty of Graduate Studies when submitting their appeal or as soon as possible thereafter.

The appellant may be accompanied by one (1) support person (friend or family) and/or legal counsel, subject to the following:

- Accompanying individuals may only attend as silent observers (i.e., they cannot participate in the proceedings);
- The Faculty of Graduate Studies must be notified of the appellant's intent to bring a support person to the Hearing at least ten (10) working days prior to the date of the Hearing;
- The Faculty of Graduate Studies must be notified of the appellant's intent to bring legal counsel to the Hearing at least twenty (20) working days prior to the date of the Hearing, and reserves the right to bring a representative from the University of Manitoba's Legal Counsel once this notice is received.

The appellant, respondent, and appeal panel shall have the right to call witnesses to appear before the panel. Witnesses are to be made available for questioning only and will not be privy to the appeal documents or the hearing proceedings in which they are not involved. The appellant must indicate their witness request in their appeal letter. The respondent shall indicate their desire to invite a witness to the Chair of the Appeal Panel no later than five (5) working days after receiving notice that the appeal will proceed to a hearing. It is the responsibility of the party calling witnesses to ensure that the witnesses are informed of the date and time of the hearing.

The Faculty of Graduate Studies will notify the Appeal Panel, appellant, and respondent of the date, time, and location and/or virtual platform of the Hearing, and will provide these parties with a Hearing Package containing all documentation to be considered in the adjudication of the appeal at least one (1) week in advance of the scheduled Hearing date. **No additional materials are to be presented at the time of the hearing.** In the case where a request is made to submit additional materials, the Chair may adjourn or postpone the hearing and allow no more than ten (10) working days for the other party to respond to the new materials.

Hearings shall be held in closed session unless at least one (1) party requests an open hearing and all parties involved in the proceedings agree to the request. During the hearing, the appellant or the respondent may request a change in the open or closed nature of the hearing, at which time the Appeal Panel shall determine, *in camera*, whether to grant this request.

The Appeal Panel shall convene prior to the arrival of the appellant (and/or representative) and the respondent to discuss the order of proceedings and questions raised by the appeal documents.

The order of proceedings is as follows:

- The appellant and/or representative will be invited to make an opening statement, followed by rounds of questioning by the Panel and then the respondent;
- The respondent will be invited to make an opening statement, followed by rounds of questioning by the Panel and then the appellant and/or representative;
- The Panel will have the opportunity to ask further questions of all parties;
- If applicable, witnesses will be called upon to enter the room individually. The Panel, appellant and/or representative and respondent will have the opportunity to ask questions;
- The appellant and/or representative and respondent will make closing statements. No new information is permitted to be presented at this time;
- The Panel will deliberate *in camera* (i.e., closed session).

All deliberations and determinations of disposition shall be held *in camera*. Such deliberations shall consider all documentation provided by the appellant and respondent, as well as all testimonies heard during the hearing.

Disposition

The Chair of the Appeal Panel shall inform the Dean of the Faculty of Graduate Studies in writing of the disposition of the appeal, the reasons for the decision, and any actions or recommendations resulting from the Panel's deliberations. The Dean of the Faculty of Graduate Studies shall, in turn, inform the appellant, their representative, and the department/unit in writing of the disposition of the appeal, the reasons for the decision and any actions or recommendations related thereto. The appellant shall be informed of their right of appeal to the Senate Committee on Appeals, including relevant time limits. The Dean of the Faculty of Graduate Studies may inform the department/unit of any recommendations brought forward by the Appeal Panel.

Appeals to Senate

As per the University of Manitoba Governing Documents: Students: Policy: Appeals Procedures (https://umanitoba.ca/governance/governing-documents-students/#senate-committee-on-appeals), appeals to the Senate Committee on Appeals shall be filed with the University Secretary within twenty (20) working days after the mailing of the notice of decision from which the appeal is made.

Discipline Appeals

The specific jurisdiction of each of the Disciplinary Authorities is outlined in:

- Table 1: Jurisdiction of Disciplinary Authorities for Student Academic Misconduct
- Table 2: Jurisdiction of Disciplinary Authorities for Student Non-Academic Misconduct
- Table 3: Disciplinary Actions and Disciplinary Authorities (https://umanitoba.ca/governance/governing-documents/#students)

If the appeal is from a decision of the Dean of the Faculty of Graduate Studies, the appeal must be submitted to the Dean of the Faculty of

Graduate Studies who will submit it to the Faculty of Graduate Studies Local Discipline Committee (also commonly referred to as the "L.D.C.")

If the appeal is from a decision of the L.D.C., the appeal must be submitted to the Secretary of the University Discipline Committee (U.D.C.) (https://umanitoba.ca/governance/governing-documents-students/#student-discipline) who will provide the Dean of the Faculty of Graduate Studies with a copy.

Discipline Appeal Deadlines

If a student wishes to appeal a decision, the notice of appeal must be delivered in writing to the appropriate person(s) within ten (10) working days of the student being notified of the decision the student intends to appeal.

Appeal of Disciplinary Action

When the appeal is against a disciplinary decision made by the Faculty of Graduate Studies, the appeal routes and procedures as outlined in the following shall prevail: Student Discipline Appeal Procedure (https://umanitoba.ca/governance/governing-documents/#students).

The student shall clearly indicate in the notice of appeal whether they are appealing the decision on:

1. the finding of facts;
2. the disposition determined by the disciplinary authority; or
3. both (1) and (2).

Other Appeals

Fee Appeals

Please refer to the Registrar's Office webpage on fee appeals (https://umanitoba.ca/registrar/tuition-fees/adjustments-refunds/). To initiate the Fee Appeal process, the student must complete a Fee Appeal form, available at the former link. For information about Fee Appeals, please visit the Registrar's Office online or in person at 400 University Centre.

Term Work Appeals

Students are encouraged to discuss matters relating to grading of term work with their instructor in the first instance. Further appeals of grades on academic term work shall be directed, by the appellant, to the department/unit responsible for the course within ten (10) working days after the grades for term work have been communicated to students. Following receipt of the appropriate appeal form and evidence of payment of the refundable appeal fee, the department/unit shall consider the appeal and provide a decision within fifteen (15) working days. Please refer to the Registrar's Office website (https://umanitoba.ca/registrar/grades/appeal-grade/) for additional information.

If the student has exhausted the term work appeals process through the Registrar's Office, the student may appeal to the Faculty of Graduate Studies via the academic appeals process. The Faculty of Graduate Studies will only consider the appeal based on procedural error.

Final Grade Appeals

Please refer to the Registrar's Office webpage (https://umanitoba.ca/registrar/grades/appeal-grade/) on grade appeals. To initiate the Grade Appeal process, the student must complete a Grade Appeal form, available at the former link. For information about Grade Appeals, please visit the Registrar's Office online or in person at 400 University Centre.

If the student has exhausted the final grade appeals process through the Registrar's Office, the student may appeal to the Faculty of Graduate Studies via the academic appeals process. The Faculty of Graduate Studies will only consider the appeal based on procedural error.

Assistance with Appeals

The Office of Student Advocacy & Case Management (https://umanitoba.ca/student-supports/academic-supports/student-advocacy/), 520 University Centre, provides information and assistance to students regarding all appeal processes. It is strongly recommended that students contact the Office of Student Advocacy & Case Management to assist them with any appeal they are considering.

Thesis/Practicum Types

A student/candidate may present a thesis/practicum in one of two acceptable formats:

- Regular style
- Manuscript/grouped manuscript style

The type of thesis/practicum must be approved by the advisory committee and comply with all regulations of the Faculty of Graduate Studies and any supplementary regulations of the department/unit.

Regular Style

Prefatory Pages

Title Page

The title page must contain the following information:

- the title of the thesis/practicum
- the name of the University
- the degree for which the thesis/practicum is submitted
- the name of the department/unit
- the full name of the author
- the copyright notation ©

The title must be a meaningful description of the content of the research. The author's name should be in full, identical to the name under which they are registered and be consistent on all other documents. A sample title page can be found on this link (https://umanitoba.ca/faculties/graduate_studies/media/ThesisSampleTitlePage.pdf).

Abstract

The abstract is expected to provide a concise, accurate account of the thesis/practicum. Recommended length is 350 words. An abstract should contain a statement of the problem, methods, results, and conclusions.

Acknowledgements

The content of this single page is left to the discretion of the author. For example, the page may make reference to the student/candidate's advisor/co-advisor and advisory committee, to other individuals who have provided invaluable assistance to the development of the thesis/practicum, and to sources of financial assistance or other support.

Dedication

A single page pertaining to a dedication is allowed.

Table of Contents

This must list and provide page references to all elements of the thesis/practicum. The numbering and formatting must be identical to the way the material appears in the text. Page numbers should be right

justified. A sample table of contents can be found at this link (http://umanitoba.ca/graduate-studies/sites/graduate-studies/files/2020-04/ThesisSampleTOC.pdf).

List of Tables

This should immediately follow the Table of Contents and be of the same format. The list must include the number, name and page number of each table.

List of Figures

This should immediately follow the List of Tables and be of the same format as the Table of Contents. The list must include the number, name and page number of each figure.

List of Copyrighted Material

On occasion, students/candidates include images, figures, photos and other materials from copyrighted sources. Students must ensure that they have authorization to use copyright protected materials in their thesis under a Copyright Act exemption or with direct permission from the copyright holder. A list of Copyrighted Material should follow the List of Figures and follow the same format as the Table of Contents. For further information on copyright please refer to the following link (https://umanitoba.ca/graduate-studies/student-experience/thesis-and-practicum/before-you-start/).

Format

Styles

The thesis/practicum should be written in a standard style manual that has been recommended by the department/unit. Manuals recommended by the Faculty of Graduate Studies include but are not limited to:

- American Psychological Association, Publication Manual of the American Psychological Association
- Kate L. Turabian, A Manual for Writers of Term Papers, Theses and Dissertations
- The Modern Language Association of America, MLA Handbook for Writers of Research Papers
- University of Chicago Press, The Chicago Manual of Style

Students should always use the latest edition available. If there is a conflict between the instructions in this guide and the style manual chosen, the former should be followed.

Spelling

Canadian, British or American spelling is acceptable, and one style must be used consistently throughout the document.

Format

The entire thesis/practicum must be in the same text font, style, and size.

Margins

The margins must be consistent throughout the thesis/practicum (including appendices, diagrams, maps, photographs, charts, tables, etc.).

Page Numbers

Each page of the thesis/practicum (including illustrative pages and appendices) must be numbered consecutively.

Footnotes, References and Appendices

Instructions in the style manual recommended by the department/unit should be followed. Regardless of which style manual is used, format selected must be consistent throughout the document.

Figures, Illustrations, Photographs and Design Drawings

Illustrative Material

All illustrative material must be consistent throughout the thesis/practicum. All figures, illustrations, photographs and drawings must be numbered consecutively in Arabic numerals and accompanied with a title. The material should appear as soon as possible after as it is mentioned in the text. All original materials should be of high quality, with sharp and clear images and copyright secured if from another source.

Layout of Tables and Figures

Each table and figure must have a number and title. The number and title should appear at the top or bottom of the table or figure as per style. The title of the table or figure should be as short as possible and indicate the major focus of the material within the table or figure.

Additional Materials

Consent and Access to Information Forms

Sample copies of consent forms that were used to obtain consent from participants to take part in the information gathering procedures for the thesis/practicum must be included in an Appendix. Any personal information including signatures, personal phone number and email addresses must be omitted from the submitted form to meet F.I.P.P.A. regulations (https://umanitoba.ca/access_and_privacy/FIPPA.html).

In some cases, approval from an agency, institution or corporation may have been required before the information gathering procedures could proceed. The original approval form for access should be retained by the student with a copy provided to the Faculty of Graduate Studies upon completion of the thesis/practicum.

Use of Copyrighted Material

If the thesis/practicum includes copyrighted material (such as images, figures or more than an insubstantial amount of another person's work pursuant to the Copyright Act), students must determine whether there is authorization for reuse of material under the Copyright Act or if permission must be obtained from the copyright holder. A Sample Permission Letter (https://umanitoba.ca/admin/vp_admin/ofp/copyright/media/Permission_letter_student.docx) is available on the Copyright Office website (https://umanitoba.ca/copyright/). In some cases, copyright holders prefer to use their own permission forms and/or will provide their permission electronically.

Note that obtaining permission may take a considerable amount of time and this must be taken into consideration when meeting a thesis/practicum submission deadline. A reference to written permission having been obtained should be included under the image or text. The original form(s) signed by the copyright holders should be retained by the student as they made need to refer to it from time to time in future. These forms do not need to be provided to the University of Manitoba and should not be included within the student's thesis/practicum.

In some cases where permission is required the copyright holder cannot be located or the cost is prohibitive to use the text or image. In these

situations, the text or image may have to be omitted from the thesis/practicum.

Subsequently, information on where the reader can locate the image or text should be included, such as the URL, title of book/journal, volume and issue number, page number, publisher, and date of publication. A description of the purpose or significance of the text or image should be provided.

For further information on copyright, see https://umanitoba.ca/copyright/

Manuscript/Grouped Manuscript Style

A thesis/practicum may comprise a paper or collection of papers, which are suitable for submission for publication. The number of papers that comprise this style of thesis/practicum will be determined between the student and the advisory committee. The formatting of the thesis/practicum must be consistent throughout the thesis/practicum and the thesis/practicum cannot merely consist of several papers or articles contained within the one document.

Publication, or acceptance for publication, of research results prior to the presentation of the thesis/practicum does not supersede the evaluation of the work by the examination committee (i.e. does not guarantee that the thesis/practicum will be found acceptable). Advisors and examiners may specify revisions regardless of the publication status.

The thesis/practicum must follow the same prefatory information; spelling, formatting, margin requirements, page numbering; footnotes and appendices; figures, illustrations photographs and drawings; and any additional material as those outlined above. There must be an introductory chapter to the entire thesis/practicum that precedes any of the papers. The papers must contribute toward the overall theme that represents the thesis/practicum work and must be smoothly integrated into the flow of the thesis/practicum to produce a unified document. This may require changes or additions to, and re-writing of, any work that has been previously published.

The introductory chapter must explain the connection between the different chapters. This provides a logical link of the integration of the information. Not including an explanation of how the chapters connect may compromise the ability of the examiners to evaluate the thesis/practicum and, accordingly, there may be subsequent consequences.

The thesis/practicum must contain a concluding chapter that includes a discussion on how the entirety of the thesis/practicum, with its findings, provides a distinct contribution to knowledge in the research area.

Thesis authorship for all papers must be acknowledged. In the case of multi-authored papers, the nature and extent of the student/candidate's contribution, and those of the other authors, must be explicitly specified in a section of the thesis/practicum entitled "Contributions of Authors".

Awards Information

Campus Address/General Office: 500 University Centre
Telephone: (204) 474-9377
Fax: (204) 474-7553
Email Address: graduate.awards@umanitoba.ca

Graduate students seeking information on scholarships, bursaries, prizes and loans should consult with the Awards Office in the Faculty of Graduate Studies.

Graduate Award Programs

The following awards are offered through the Faculty of Graduate Studies, which lists the value and deadline to submit applications. A complete listing of awards is on the FGS website; please see our Funding, Awards and Financial Aid (https://umanitoba.ca/graduate-studies/funding-awards-and-financial-aid/) page, or searchable Awards Database (http://webapps.cc.umanitoba.ca/gradawards/)

Please note that awards information is subject to change. The most up-to-date information can be found on our website.

(CIHR) Canadian Institutes of Health Research (https://cihr-irsc.gc.ca/e/193.html)

$ 17,500 CGS Master's, per annum for duration of award

Deadline: December 1. Application can be found on CGSM website (https://cihr-irsc.gc.ca/e/193.html).

(NSERC) Natural Sciences and Engineering Research Council (https://www.nserc-crsng.gc.ca/index_eng.asp)

Amounts are per annum for duration of award.

Postgraduate Scholarship (PGS)

$21,000 Ph.D. (PGS D)

Canada Graduate Scholarship (CGS)

$17,500 Masters (CGSM) - Deadline: December 1. Application can be found on NSERC (https://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM_eng.asp) website.

$35,000 Doctoral (CGSD) - Consult department for departmental deadline in September.

(SSHRC) Social Sciences and Humanities Research Council (https://www.sshrc-crsh.gc.ca/home-accueil-eng.aspx)

Amounts are per annum for duration of award.

$17,500 Master's - Deadline: December 1. Application can be found on SSHRC (https://www.nserc-crsng.gc.ca/Students-Etudiants/PG-CS/CGSM-BESCM_eng.asp) website.

$20,000 Ph.D. - Consult department/unit for their specific deadline in October.

$35,000 CGS Doctoral - Consult department/unit for their specific deadline in October.

Vanier Canada Graduate Scholarships (https://vanier.gc.ca/en/home-accueil.html)

$50,000 Ph.D., per annum for duration of award

Deadline to be determined. Please check with Awards Office for details.

University of Manitoba Graduate Fellowship (UMGF)

$14,000 for Master's

$18,000 for Ph.D.

Consult home department/unit in January for application procedure and specific deadline.

Registration Information

Registration Information for Graduate Students

All graduate students* are required to register every academic term up until graduation. This includes Fall, Winter and Summer terms.

*The re-registration requirement does not apply to occasional students, visiting students, Pre-Master's students or students on an Exceptional or Parental Leave of Absence (refer to "Leaves of Absence (p. 115)").

Initial Registration

All graduate students must initially register in the term indicated in their letter of acceptance to the Faculty of Graduate Studies. Any student not registered by the registration deadline for the term specified in their letter of offer will be required to apply for re-admission (re-admission is not guaranteed). In exceptional circumstances and with prior approval from the department/unit, students may defer registration for up to one (1) year following acceptance into the Faculty of Graduate Studies.

A student's program of study must be approved by the Head of the major department/unit or designate. Approval to take courses from departments/units outside the major department/unit must be obtained from the outside department/unit.

Re-Registration

In addition to course registration, students must register in the Master's re-registration course (GRAD 7020) or Doctoral re-registration course (GRAD 8020) every term. Registration in the re-registration course ensures students retain their status as a graduate student and are assessed the appropriate fees.

For more information about registration, see the Registration Procedures (p. 88) section of the FGS Academic Guide.

Returning Students & Progress Reports

Student progress must be reported **at least** annually to the Faculty of Graduate Studies on the "Progress Report (https://umanitoba.ca/graduate-studies/forms/)" form. Failure to submit a Progress Report will result in a hold placed on the student's record which will prevent future registration.

How to Register

The Registrar's Office provides comprehensive information about registration concerning important registration dates, tips, step-by-step how-to's, and registration errors. See https://umanitoba.ca/registrar/registration (https://umanitoba.ca/registrar/registration/).

Failure to Register

Failure to re-register while in good academic standing will result in the student being discontinued from their graduate program and the notation 'Discontinued Graduate Program' placed on their academic record. Failure to re-register while not in good academic standing* will result in the student being withdrawn and the notation 'Required to Withdraw' placed on their academic record. A student who has been discontinued and would like to be considered for continuation in a program must apply for re-admission via an online admission process.

*Good academic standing includes, but is not limited to, the regulations contained in sections Academic Performance and Performance Related to Coursework (p. 88) without exceeding the time permitted to complete a program.

Registration Reminders

Have you:

- Submitted your Progress Report form?
- Met with your advisor or department/unit for program approvals?
- Accessed Aurora Student to check for any timetable updates?
- Accessed Aurora Student to register for your courses?
- Accessed Aurora Student for a fee assessment?
- Paid your fees?

Fee Payment

Registration is not complete until fee payment or fee payment arrangements are made. Students are urged to refer to the Registrar's Office for information on Tuition and Fees, payment deadlines, how to view your fees, etc. See https://umanitoba.ca/registrar/tuition-fees (https://umanitoba.ca/registrar/tuition-fees/)

Mandatory Academic Integrity Course (GRAD 7500 or GRAD 7501)

All students, including those in a Pre-Master's program, are required to register for and complete GRAD 7500 Academic Integrity Tutorial (0 credit hours) within their first term of registration. Université de Saint-Boniface graduate students may choose to complete GRAD 7500 or the French-language equivalent, GRAD 7501. For more information about GRAD 7500, see GRAD 7500 - Academic Integrity (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#grad-7500-academic-integrity).

Université de Saint-Boniface students should consult their home department for information about accessing GRAD 7501.

Mandatory Research Integrity Online Course (GRAD 7300)

All students, including those in a Pre-Master's program, are recommended to register for and complete GRAD 7300 prior to applying to any ethics boards which are appropriate to their proposed research or within the first calendar year of their program, whichever comes first. For more information about GRAD 7300, see GRAD 7300 - Research Integrity (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#grad-7300-research-integrity).

Course Classifications

Students who register themselves through Aurora Student must have prior approval of the Department/Unit Head or designate. Students registering through Aurora Student should add only those courses that are a Major (Standard "S") course in their program. Courses with Auxiliary "X", Audit "A", or Occasional "O" status must be added by the department/unit.

Course classifications Auxiliary "X", Audit "A", or Occasional "O" are explained in the FGS Academic Guide (p. 88).

Voluntary Withdrawal from Courses

Graduate students must obtain permission from their department/unit to voluntarily withdraw from courses. Students are not permitted to VW from courses without permission from their department/unit head on recommendation from their advisor/advisory committee.

Faculty of Graduate Studies "GRAD" Courses

Students who intend to graduate in the coming year (February, May or October) must register for their final GRAD capstone course (e.g., thesis, practicum, comprehensive examination, design thesis, etc.) in their final term before graduation.

Course	Title	Hours
GRAD 6000	Summer Research	0
	Only for those students commencing their programs in May or July when courses may not be available.	
GRAD 6100	Visiting Canadian Student Research Course	0
	To formalize the status of visiting Canadian Graduate Student Researchers. Students must meet the terms of the Canadian Graduate Student Research Mobility Agreement (CGSRMA), and submit the Visiting Graduate Student Research Authorization form to be eligible to register.	
GRAD 7000	Master's Thesis	0
	Fall term (Graduation in February or working on thesis during fall term only)	
	Fall & Winter terms (Graduation in May or working on thesis during fall & winter terms)	
	Winter term (Graduation in May or working on thesis during winter term only)	
	Summer term (Graduation in October or working on thesis during summer term only)	
GRAD 7010	Comprehensive Examination	0
	Fall term (Graduation in February or preparing for comprehensive exam during fall term only)	
	Fall & Winter terms (Graduation in May or preparing for comprehensive exam during fall & winter terms)	
	Winter term (Graduation in May or preparing for comprehensive exam in winter term only)	
	Summer term (Graduation in October or preparing for comprehensive exam during summer term only)	
GRAD 7020	Master's Re-registration [1]	0
GRAD 7030	Master's Practicum	0
	Fall term (Graduation in February or working on practicum during fall term only)	
	Fall & Winter terms (Graduation in May or working on practicum during fall & winter terms)	
	Winter term (Graduation in May or working on practicum during winter term only)	
	Summer term (Graduation in October or working on practicum during summer term only)	
GRAD 7050	M.Eng. Project and Report	6
GRAD 7060	Diploma Re-registration [1]	0
GRAD 7090	Design Thesis	0
	Fall term (Graduation in February or working on thesis during fall term only)	
	Fall & Winter terms (Graduation in May or working on thesis during fall & winter terms)	
	Winter term (Graduation in May or working on thesis during winter term only)	
	Summer term (Graduation in October or working on thesis during summer term only)	
GRAD 7200	MFA Thesis/Studio Exhibition	0
	Fall term (graduation in February or working on MFA thesis/studio exhibition during fall term only)	
	Fall & Winter terms (graduation in May or working on MFA thesis/studio exhibition during fall & winter terms)	
	Winter term (graduation in May or working on MFA thesis/studio exhibition during winter term only)	
	Summer term (graduation in October or working on MFA thesis/studio exhibition during summer term only)	
GRAD 7500	Academic Integrity Tutorial	0
	All students are required to successfully complete GRAD 7500 Academic Integrity Tutorial (0 credit hours) within the first term of initial registration. Failure to complete this course will result in suspension of registration privileges.	
GRAD 7501	Tutoriel d'intégrité académique	0
	All Université de Saint-Boniface students are required to successfully complete GRAD 7501 Tutoriel d'intégrité académique within the first term of initial registration. Failure to complete this course will result in suspension of registration privileges.	
GRAD 8000	Doctoral Thesis	0
	Fall term (Graduation in February or working on thesis during fall term only)	
	Fall & Winter terms (Graduation in May or working on thesis during fall & winter terms)	
	Winter term (Graduation in May or working on thesis during winter term only)	
	Summer term (Graduation in October or working on thesis during summer term only)	
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8020	Doctoral Re-registration [1]	0
Language Reading Tests		
FREN 6000	French Reading Knowledge	
FREN 6010	Spanish Reading Test	
FREN 6030	Italian Reading Test	
GRMN 6000	Reading Language Test	
RUSN 6000	Language Reading Test	
LATN 6000	Latin Reading Test	

[1] In addition to course registration, students must register in the Master's re-registration course (GRAD 7020) or Doctoral re-registration course (GRAD 8020) every term. Registration in the re-registration course ensures students retain their status as a graduate student and are assessed the appropriate fees.

Asper School of Business

Programs

The University of Manitoba's Asper School of Business offers graduate degrees for those interested in furthering their business and management understandings and skills. The AACSB accredited programs are:

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Business Administration, M.B.A. (p. 125)	1-6	63-75	Yes
Finance, M.Fin. (p. 127)	1	33	Yes
Management, M.Sc. (p. 130)	1-3	18	
Management, Ph.D. (p. 132)	4-5	30-36	
Supply Chain Management and Logistics, M.S.C.M. (p. 134)	2	48	Yes

Business Administration, M.B.A.

I.H. Asper School of Business
Dean: Dr. Bruno Silvestre
Associate Dean(s): Dr. B. Biscontri, Dr. S. Gagnon, Dr. L. Neville, Dr. S. Sivaramakrishnan, Dr. Z. Wu
Head: Dr. S. Gagnon
Campus Address/General Office: 501 Drake Centre
Telephone: 204-474-6732
Email Address: aspergradadvisor@umanitoba.ca
Website: umanitoba.ca/asper (http://umanitoba.ca/asper/)
Academic Staff: Please refer to the Asper website (https://umanitoba.ca/asper/asper-school-business/faculty/) for academic staff information.

Asper M.B.A. Program Information

The Asper Master of Business Administration is a tightly integrated 60 credit hour program, led by internationally-recognized academics and professionals, and conducted in an interactive and dynamic face-to-face learning environment.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Asper MBA Admission Requirements

The Asper MBA program has two intakes: January and August. Applicants require:

- At least a 3-year Bachelor degree from a recognized educational institution in any discipline
- 3.0 GPA on the last 60 credit hours of university level study. Under circumstances where managerial and/or professional work experience and/or community involvement have demonstrated strong business leadership potential, a lower entry GPA, but not one below 2.5, may be considered for regular admission
- 2 years professional work experience required
- 550 GMAT preferred or equivalent GRE (500 minimum)*
- Asper MBA Language Proficiency in English requirements are (one of):
  - IELTS 7.0 (no band score less than 6)
  - TOEFL 100 (internet)
  - MELAB 85
  - CAEL 60
  - PTE (A) 65
  - CanTEST 4.5 in all four sections
  - AEPUCE 85%, if entering AEPUCE with an IELTS of 6.0

*MBA applicants who graduated from the B.Comm. degree program at University of Manitoba in the last 5 years with a degree GPA of 3.5 are exempt from the GMAT requirement.

*MBA applicants with a degree GPA of 3.5 or higher who have graduated from the University of Manitoba with a B.Sc. in the last 5 years and have a grade of B+ or higher in Math 1230, 1500, 1501, 1510, 1520 or 1690 or another course in calculus with permission of the Asper School of Business MBA Admissions Committee and a grade of B+ or higher in Statistics 1000, 1001 or 1150 or another course in statistics with permission of the Asper School of Business MBA Admissions Committee would be exempt from the GMAT/GRE requirement.

*MBA applicants with a degree GPA of 3.5 or higher who have graduated from the University of Manitoba with a B.Eng. in the last 5 years and have a grade of B+ or higher in ENG 3000 and a grade of B+ or higher in Math 1230, 1500, 1501, 1510, 1520 or 1690 or another course in calculus with permission of the Asper School of Business MBA Admissions Committee and a grade of B+ or higher in Statistics 1000, 1001 or 1150 or another course in statistics with permission of the Asper School of Business MBA Admissions Committee would be exempt from the GMAT/GRE requirement

*MBA applicants with a degree GPA of 3.5 or higher who have graduated from the University of Manitoba with a B.A. in the last five years and have a grade of B+ or higher in two of ECON 2010, 2030, 3010, 3020 and have a grade of B+ or higher in Math 1230, 1500, 1501, 1510, 1520 or 1690 or another course in calculus with permission of the Asper School of Business MBA Admissions Committee and a grade of B+ or higher in Statistics 1000, 1001 or 1150 or another course in statistics with permission of the Asper School of Business MBA Admissions Committee would be exempt from the GMAT/GRE requirement.

*MBA applicants who hold the CPA designation (CPA Canada) or the CFA designation, are in good standing with their professional body, and have been practicing in their respective field for the past two years or longer would be exempt from the GMAT/GRE requirement.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Asper MBA program of study (https://umanitoba.ca/explore/programs-of-study/business-administration-mba/) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

Degree Requirements

Boot Camps and Workshops

Mandatory preparatory boot camps and workshops help develop the necessary skills to succeed in the Asper MBA program and in the business world. The Asper School of Business MBA has three regularly offered pass/fail auxiliary courses (X):

- MSCI 5110 (Math Boot Camp) – online number crunching primer (challenge exam option available).
- MIS 5120 (Information Technology Boot Camp) – online course that provides you with the basics of common productivity software packages used in the business world, with particular focus on Excel (challenge exam option available).
- IDM 5120 – develop the "soft skills" you need to advance your career, such as business etiquette, networking, resume-building and behaviour-based interview skills.

Program Core

The Program Core consists of 30 credit hours of business fundamentals and strategy, and a foundation in leadership, decision-making methods, and contemporary themes that inform decisions in today's business world.

Business Foundations

Course	Title	Hours
GMGT 7200	Critical and Creative Thinking	1.5
ACC 7010	Accounting Fundamentals	3
FIN 7000	Managerial Economics	1.5
FIN 7020	Corporate Finance	3
GMGT 7220	Managing People in Organizations	3
OPM 7120	Operations and Supply Chain Management	3
MKT 7010	Marketing Management	3
ACC 7020	Managerial Accounting	1.5
MIS 7120	Management Information Systems	1.5
GMGT 7210	Strategy	3
Total Hours		**24**

The Strategy Capstone Course, to be taken in the last term of the program, provides a holistic perspective on managing an organization or business by integrating all the functional areas and themes explored in the Program Core.

Leadership

Course	Title	Hours
IDM 7120	Executive Leadership and Responsibilities	3
IDM 7510	Strategic Leadership and Managing Change	1.5
Total Hours		**4.5**

Business Themes

Course	Title	Hours
IDM 7130	Contemporary Themes in Business	1.5
Total Hours		**1.5**

Contemporary Themes in Business focuses on three themes: International and Emerging Markets, Sustainability, and Entrepreneurship and Innovation. These themes also inform the two Leadership courses and the Strategy Capstone Course. Together, they prepare you for the realities of business – and give you a distinct advantage in today's competitive job market.

Concentrations and Themes

Tailor your MBA to your passion, your experience and the career you want. Half of the program (30 credit hours) is made up of electives, allowing a world of options to customize your program. Focus your studies on two functional areas, two themes, or a combination of area and theme. You can earn up to two concentrations/themes – the choice is entirely yours. Students can obtain a concentration by taking 12 credit hours of electives in that area or theme.

Specialized Concentration

- Financial Analyst

Functional Concentrations

- Finance
- Leadership and Organizations
- Marketing
- Supply Chain Management

Themed Concentrations

- International and Emerging Markets
- Sustainability
- Entrepreneurship and Innovation

Interdisciplinary Concentrations

- Health Administration
- Management of Public Enterprises
- Individual Interdisciplinary Studies

General Management Option

- Choose any combination of Asper MBA electives to suit your personal and professional goals.

An Experiential Course is a mandatory component of each of the three themes. It provides hands-on integrated business-related experience through opportunities such as an international study trip, a domestic industry project, stock market simulation, or launching a business.

*Please note: Not every combination of two themes and/or concentrations may be achieved in any given year/12 month program. GMGT 7210 constitutes the comprehensive examination. The course must be completed at the University of Manitoba normally in the final term of a student's program, or once all the course pre- and co-requisites are satisfied.

Readings Courses and Industry Projects - With the approval of the MBA Program Committee and the academic area involved, a student can choose to undertake an industry (consulting) project or a readings course. The industry projects and readings courses count as three credit hours of elective coursework. Normally, a student is allowed up to two readings courses, two industry projects, or one readings course and one industry project during the program. An industry or readings course proposal must be submitted to a faculty supervisor and the MBA Program Committee for approval prior to registration for the course. Projects and reading courses can normally only be taken within the Asper School of Business, and normally cannot be counted towards a concentration.

No thesis option is available.

MBA Co-op Program

MBA students have an option to enrol in the MBA Co-op Program and complete a co-op work term as an elective in their program (IDM 7140 – 3 credit hours). The course consists of a work term assignment of a minimum of 420 hours in business, industry, or government.

To apply for a co-op work term, MBA students must have a degree GPA of at least 3.00 and normally would have completed all 30 credit hours of MBA core courses; at a minimum, students must have completed at least 27 of their program credit hours, including successful completion of IDM 5120. An interview with the Graduate Co-op Office personnel will be required for admission to the Asper MBA Co-op Program and applicants for the MBA Co-op Program will be evaluated based on a complete application.

Expected Time to Graduate: 1 - 6 years.

- Full Time: 12 months or up to 2 years.
- Part Time: Take up to six years (the average is three).
- Exemptions: You may qualify for a number of course exemptions, reducing your program course load and cost, if you:
  - Completed a business or management degree (or economics major) in a recognized university degree program, or courses in another MBA program, within the last five years, or
  - Have certain professional designations within a field where you are active and practicing.

Progression Chart

Course	Title	Hours
Years 1-6		
Required Courses		
MIS 5120	Spreadsheet Skills for Management (AX)	1
MSCI 5110	Basic Quantitative Analysis for Management (AX)	1
IDM 5120	Career Development Seminar (AX)	1
GMGT 7200	Critical and Creative Thinking	1.5
IDM 7130	Contemporary Themes in Business	1.5
FIN 7000	Managerial Economics	1.5
FIN 7020	Corporate Finance	3
GMGT 7220	Managing People in Organizations	3
MKT 7010	Marketing Management	3
IDM 7120	Executive Leadership and Responsibilities	3
ACC 7010	Accounting Fundamentals	3
OPM 7120	Operations and Supply Chain Management	3
IDM 7510	Strategic Leadership and Managing Change	1.5
ACC 7020	Managerial Accounting	1.5
MIS 7120	Management Information Systems	1.5
GMGT 7210	Strategy (program capstone course; ideally completed in the last term of the program)	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Elective Courses		
Select 10-14 Elective Courses [1]		30-42
Co-op for Professional Graduate Programs [2]		
	Hours	**63-75**
	Total Hours	**63-75**

1. Selections will vary for individuals, depending on chosen concentration(s) – see calendar entry. Total credits hours for the degree is 60 (max 72).
2. IDM 7140 MBA Co-op elective can be completed any time past the half way point of the program (after 30 credit hours).

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Finance, M.Fin.

I.H. Asper School of Business

Dean: Dr. Bruno Silvestre
Associate Dean(s): Dr. B. Biscontri, Dr. S. Gagnon, Dr. L. Neville, Dr. S. Sivaramakrishnan, Dr. Z. Wu
Head: Dr. S. Gagnon
Campus Address/General Office: 501 Drake Centre
Telephone: 204-474-6732
Email Address: aspergradadvisor@umanitoba.ca
Website: umanitoba.ca/asper (http://umanitoba.ca/asper/)
Academic Staff: Please refer to the Asper website (https://umanitoba.ca/asper/asper-school-business/faculty/) for academic staff information.

Asper M.Fin. Program Information

The Asper Master of Finance is a CFA Institute University Affiliation Program. It is a comprehensive one-year/three-term program that prepares students to write all three levels of exams needed to obtain a Chartered Financial Analyst (CFA) designation, with a focus on the Level 1 exam. The program has been mapped to align with the CFA Program Curriculum.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Asper M.Fin. Admission Requirements

Admission to the Master of Finance program is based on the following criteria:

1. At minimum, a three#year Bachelor degree from a post-secondary recognized educational institution (in any discipline);
2. At a minimum, a 3.0 admission GPA (on 4.5 scale) on the last 60 credit hours of university degree#level study;
3. Results of the Graduate Management Admissions Test (GMAT), with a minimum score of 550.

   The GRE will be accepted with a percentile score across its components equivalent to the current acceptable percentile level of the GMAT. The percentile score on the quantitative section of the GMAT or GRE examinations must be at the 60th percentile or higher. GMAT and GRE scores must not be older than five years.

   Note: GMAT/GRE scores are not required for applicants who have successfully passed the CFA Level 1 examination. GMAT/GRE scores are not required for those applicants who have successfully completed a bachelor degree from the University of Manitoba with a minimum 3.25 GPA and who have also:

   Completed FIN 2200 (Corporate Finance) at the Asper School of Business with a minimum grade of B+, within the last five years (if FIN 2200 is completed beyond five years from the term of admission, it may be counted, if the applicant can demonstrate, to the satisfaction of the Admissions Committee, that they have been working in a professional role that makes substantial use of this knowledge; or,

   Achieved an average 3.5 GPA across the four Asper finance courses counting toward the finance major requirements within the last five years (if courses are completed beyond five years from the term of admission, they may be counted, if the applicant can demonstrate, to the satisfaction of the Admissions Committee, that they have been working in a professional role that makes substantial use of this knowledge.
4. Language proficiency. Applicants holding secondary school diplomas and/or university degrees from Canada, or from one of the countries on the English Language Proficiency Test Exemption list are exempt from the English Language Proficiency Test requirement. If you do not qualify for an exemption, you must provide an official score from one of these accepted tests:
   a. IELTS 6.5 (speaking band minimum is 6)
   b. TOEFL 86 (internet) - Minimum score of 20 is required in each of reading, writing, listening, and speaking categories)
   c. MELAB 80
   d. CAEL 60 and 60 on each subject
   e. PTE (A) 61%
   f. AEPUCE 65%
   g. CanTEST - 4.5 in listening and reading; 4.0 in writing and oral interview

   Scores older than two years are not acceptable.
5. Two letters of recommendation from persons who are knowledgeable about the applicant's academic ability.

Note: Graduates of the Asper MBA program with a Finance concentration are not eligible to take this program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Asper MFin program of study (https://umanitoba.ca/explore/programs-of-study/finance-mfin/) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

Degree Requirements

To complete the Master of Finance degree, students must successfully complete 30 credit hours. Required courses will be taught over the Fall, Winter, and Summer terms, and the program will require 12 months of full#time study to complete.

The required courses are:

Course	Title	Hours
ACC 7010	Accounting Fundamentals	3
FIN 7000	Managerial Economics	1.5
FIN 7020	Corporate Finance	3
FIN 7130	Alternative Markets and Instruments	1.5
FIN 7140	Financial Modeling	3
FIN 7180	Behavioural Finance	3
FIN 7152	Investment Policy	3
FIN 7080	International Finance	3
FIN 7010	Professional Financial Ethics	3
FIN 7192	Portfolio Management	3
FIN 7190	Fixed Income Securities	3
MIS 5120	Spreadsheet Skills for Management (AX – Pass/Fai)	1

MSCI 5110	Basic Quantitative Analysis for Management (AX – Pass/Fai)	1
IDM 5120	Career Development Seminar (AX – Pass/Fai)	1
Total Hours		**33**

No thesis option available. A part-time option is also available.

MFin Co-op Program

MFin students have an option to enrol in the MFin Co-op Program and complete a co-op work term as an additional elective in their program (IDM 7140 – 3 credit hours). The course consists of a work term assignment of a minimum of 420 hours in business, industry, or government.

To apply for a co-op work term, MFin students must have a degree GPA of at least 3.00 and normally would have completed all 30 credit hours of MFin core courses; at a minimum, students must have completed at least 27 of their program credit hours, including successful completion of IDM 5120. An interview with the Graduate Co-op Office personnel will be required for admission to the Asper MFin Co-op Program and applicants for the MFin Co-op Program will be evaluated based on a complete application.

Expected Time to Graduate: 1 year

Progression Chart

Course	Title	Hours
Year 1		
Fall		
MIS 5120	Spreadsheet Skills for Management	1
MSCI 5110	Basic Quantitative Analysis for Management	1
IDM 5120	Career Development Seminar	1
FIN 7000	Managerial Economics	1.5
FIN 7020	Corporate Finance	3
FIN 7010	Professional Financial Ethics	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**10.5**
Winter		
ACC 7010	Accounting Fundamentals	3
FIN 7130	Alternative Markets and Instruments	1.5
FIN 7080	International Finance	3
FIN 7152	Investment Policy	3
	Hours	**10.5**
Summer		
FIN 7140	Financial Modeling	3
FIN 7190	Fixed Income Securities	3
FIN 7192	Portfolio Management	3
FIN 7180	Behavioural Finance	3
	Hours	**12**
Year 2		
Fall		
IDM 7140	Co-op for Professional Graduate Programs [1]	3
	Hours	**3**
	Total Hours	**36**

[1] Students can complete a co-op work term as an additional elective in their program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Management, M.Sc.

I.H. Asper School of Business
Dean: Dr. Bruno Silvestre
Associate Dean(s): Dr. B. Biscontri, Dr. S. Gagnon, Dr. L. Neville, Dr. S. Sivaramakrishnan, Dr. Z. Wu
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Website: umanitoba.ca/asper (http://umanitoba.ca/asper/)
Academic Staff: Please refer to the Asper website (https://umanitoba.ca/asper/asper-school-business/faculty/) for academic staff information.

M.Sc. in Management Program Information

Students admitted to the Master of Science in Management degree program will pursue a research-focused degree in one of the departments of Marketing, Finance, Actuarial Mathematics, Business Administration or Supply Chain Management. The M.Sc. program in Management is designed to produce graduates who have an academically more in-depth, rigorous training in their chosen management field than is the case for either B.Comm (Hons.) graduates or MBA graduates. In addition, the program seeks to develop strong research skills to meet the needs of employers as well as to more effectively prepare M.Sc. students for entrance into Ph.D. programs at the University of Manitoba.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.Sc. in Management Admission Requirements

Applicants must possess at least a four-year honours (or equivalent) degree from a recognized university in either a) management/business with a major in the same area or a similar area to be pursued in the M.Sc. or b) a degree from another Faculty with a closely related major. Applicants must provide the following prior to admission:

- A statement of goals and interests;
- An official transcript of academic record with a minimum grade point average of 3.0 on a 4.5 scale (approximately 70% or a "B") in the last 60 credit hours;
- A score on a graduate aptitude test, preferably the GMAT, with a minimum score of 550 (GRE will be accepted with a mean percentile score across the three areas similar to the current acceptable percentile level of the GMAT);
- Three letters of recommendation two of which are from persons who know the candidate's academic ability.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Management M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/management-msc/) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

Degree Requirements

The basic program design assumes that students have completed an honours degree or its equivalent. Additional courses may be required subject to the discretion of the advisory committee if it is deemed that the candidate's preparation is not sufficient in his/her area of specialization. The student's advisory committee will make recommendations regarding deficient background, and the final program will be approved by the Graduate Research Program Committee.

All students must complete the following course requirements:

A minimum of 18 credit hours, at 7000 level or above, plus a thesis/practicum. This minimum will include:

1. at least 6 credit hours of required graduate level courses in the student's area of specialization and up to 12 credit hours of optional courses (subject to the approval of the advisory committee) - see area specific requirements below;
2. a thesis or a practicum.

Business Administration (Industrial Relations/Human Resource Management/Management of Organizations/Organizational Behaviour) Option

Course	Title	Hours
GMGT 7440	Doctoral Seminar in Organizational Theory (Ph.D.)	3
or GMGT 7410	Doctoral Seminar in Organizational Behaviour (Ph.D.)	
Select one of the following:		3
GMGT 7540	Doctoral Seminar in Research Methods (Ph.D.)	
GMGT 7080	Research Methods	
An equivalent 3-credit hour graduate level course in quantitative methods from another Faculty		
Select four additional optional courses [1]		12
Total Hours		**18**

[1] Among them, students are encouraged to take:
1. an additional research methods course (quantitative or qualitative) and either a statistics or econometrics course and
2. a philosophy of science course.

Marketing Option

Course	Title	Hours
Select 6 credit units from the following:		6
MKT 7100	Readings in Marketing (Ph.D.)	
MKT 7110	Doctoral Seminar in Marketing (Ph.D.)	
MKT 7120	Ph.D. Seminar in Buyer Behavior (Ph.D.)	
MKT 7080	Selected Topics in Marketing	
Select 6 credit hours of approved research methods coursework at the graduate level		6

Select 6 credit hours of approved coursework relevant to the chosen area of study	6
Total Hours	**18**

Supply Chain Management Option

Course	Title	Hours
SCM 7020	Seminar in Supply Chain Management	3
OPM 7120	Operations and Supply Chain Management (recommended) (or other graduate level course in Supply Chain Management)	3
MKT 7080	Selected Topics in Marketing (recommended) (or equivalent graduate level course)	3
Select at least three optional courses [1]		9
Total Hours		**18**

[1] At least three courses relevant to the student's area of specialization at the 7000 level, from inside or outside the Asper School of Business, subject to the approval of the Curriculum Advisory Committee. Graduate level courses are recommended

Actuarial Mathematics Option

A total of 18 credit hours plus a thesis/practicum are required.

Course	Title	Hours
Required		
Select two of the following:		6
ACT 7540	Advanced Topics in Actuarial Mathematics	
ACT 7300	Seminars in Actuarial Science	
ACT 7400	Longevity Risk Modeling and Management	
ACT 7600	Applied Statistical Methods in Actuarial Science	
Options		
Select 12 credit hours from the following:		12
ACT 7050	Readings in Quantitative Methods	
ACT 7540	Advanced Topics in Actuarial Mathematics	
ACT 7300	Seminars in Actuarial Science	
ACT 7400	Longevity Risk Modeling and Management	
ACT 7600	Applied Statistical Methods in Actuarial Science	
STAT 7310	Research Tools for Statistics	
ABIZ 7410	Agricultural Finance	
FIN 7020	Corporate Finance	
FIN 7700	Financial Economics	
Other 7000 level courses relevant to the Actuarial Mathematics specialization (e.g. Finance, Investments, etc.) as approved by the Curriculum Advisory Committee		
Total Hours		**18**

Finance Option

Course	Title	Hours
Mandatory		
FIN 7700	Financial Economics	
Select one of the following:		3
FIN 7710	Empirical Asset Pricing	
FIN 7712	Seminar in Corporate Finance	
Options [1]		
Select one course in Research Methods from Econometrics courses offered at the Graduate level		3
Select at least one of Microeconomics or Macroeconomics offered at the graduate level		3
Select two optional electives chosen from graduate level courses offered in Finance, Econometrics, Microeconomics or Macroeconomics		6
Total Hours		**15**

[1] The recommended structure shown below is adjustable depending on the student's background and approval of the student's Curriculum Advisory Committee.

Expected Time to Graduate: 1-3 years

Progression Chart

Course	Title	Hours
Year 1		
Select 6 courses (all at 7000 level or higher) [1]		18
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**18**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

[1] See specific program requirements, by area, in the calendar.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Management, Ph.D.

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Website: umanitoba.ca/asper (http://umanitoba.ca/asper/)
Academic Staff: Please refer to the Asper website (https://umanitoba.ca/asper/asper-school-business/faculty/) for academic staff information.

Ph.D. in Management Program Information

The Doctor of Philosophy program in Management is designed to prepare individuals for teaching and research careers in universities, or for applied research positions in either the private or public sector.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Ph.D. in Management Admission Requirements

An earned Master's degree (MBA preferred), and in exceptional cases, a Bachelor's degree in a management or business discipline from a recognized institution, or a discipline sharing a common origin or a parallel discipline to the applicant's chosen area of concentration, is required.

Prior to admission, the candidate is to provide the following:

- A statement of goals and interests;
- An official transcript of academic record with a minimum grade point average of 3.0 on a 4.5 scale (3.5 preferred), (approximately 70% or a "B") in the last 60 credit hours;
- A score on a graduate aptitude test, preferably the GMAT, with a minimum score of 600 (GRE will be accepted with a mean percentile score across the three areas similar to the current acceptable percentile level of the GMAT);
- Three letters of recommendation from persons who know the candidate's academic ability;
- Evidence of research and teaching ability.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Management Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/management-phd/) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

Degree Requirements

The PhD program consists of up to 30 credit hours of courses plus a thesis; 12 credit hours of core requirements (specified by each area) and up to 18 credit hours of other requirements. The Finance option requires up to 27 credit hours of other course requirements, in addition to the 12 credit hours of core requirements. In addition, two zero credit project courses are mandatory for all students. Other requirement courses may be waived based on courses completed in a previous degree (Master's level), while the core and paper requirements must be completed in the Asper PhD program.

Marketing Core Requirements

Course	Title	Hours
MKT 7110	Doctoral Seminar in Marketing (Ph.D.)	3
MKT 7120	Ph.D. Seminar in Buyer Behavior (Ph.D.)	3
MKT 7080	Selected Topics in Marketing	3
MKT 7100	Readings in Marketing (Ph.D.)	3
Total Hours		**12**

Business Administration Core Requirements

Course	Title	Hours
Select one of the following:		3
GMGT 7410	Doctoral Seminar in Organizational Behaviour (Ph.D.)	
GMGT 7440	Doctoral Seminar in Organizational Theory (Ph.D.)	
GMGT 7530	Selected Topics	
Select three of the following:		9
GMGT 7410	Doctoral Seminar in Organizational Behaviour (Ph.D.)	
GMGT 7440	Doctoral Seminar in Organizational Theory (Ph.D.)	
GMGT 7530	Selected Topics	

Topics courses in the area of organizational behaviour, organizational theory, strategy, entrepreneurship, international business, industrial relations and human resource management	
Total Hours	**12**

Finance Core Requirements

Course	Title	Hours
FIN 7700	Financial Economics	3
FIN 7710	Empirical Asset Pricing	3
FIN 7712	Seminar in Corporate Finance	3
FIN 7714	Advanced Financial Theory	3
Total Hours		**12**

Supply Chain Management Core

Course	Title	Hours
Four 3 credit hour courses from the following:		
SCM 7016	Simulation Models for Operations Manageement	3
SCM 7018	Seminar in Production & Operations Management	3
SCM 7020	Seminar in Supply Chain Management	3
SCM 7030	DOC SEM IN SC SUSTAINABILITY	3
MSCI 7550	Readings in Management Science (Ph.D.)	3
MSCI 7560	Doctoral Seminar in Management Science (Ph.D.)	3
MSCI 7680	Mathematical Optimization Models	3
OPM 7300	Topics in Advanced Production and Operations Management	3

Paper Courses

Course	Title	Hours
PHDM 7140	Management Research Project 1 (Ph.D) (pass/fail)	0
PHDM 7150	Management Research Project 2 (Ph.D) (pass/fail)	0
Total Hours		**0**

Other Requirements

Course	Title	Hours
PHDM 7110	Doctoral Seminar in Management (Ph.D.)	3
Select three methods or statistics courses at 7000 level or higher [2]		9
Select two minor/cognate courses [3]		6
Total Hours		**18**

1 Finance students are exempt from this requirement.

2 Finance students may take up to 6 methods courses (18 credit hours).

3 At least one of which must be outside the Asper School - Finance students may take up to 3 minor/cognate courses (9 credit hours).

Students who do not have a previous business degree will be required to also audit at least one (but up to three) breadth courses in different disciplines inside the Asper School (but outside their core area of study).[1]

1 PhD students at the Asper School cannot utilise Asper MBA courses to satisfy any of the program requirements (other than breadth requirements, if needed).

Expected Time to Graduate: 4 - 5 years

Progression Chart

Course	Title	Hours
Year 1		
Select 6 courses (all at 7000 level or higher) [1]		18
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**18**
Year 2		
Select 4-6 courses (all at 7000 level or higher) [1]		12-18
PHDM 7140	Management Research Project 1 (Ph.D)	0
PHDM 7150	Management Research Project 2 (Ph.D)	0
	Hours	**12-18**
Year 3		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**30-36**

1 See specific program requirements, by area, in the calendar.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Supply Chain Management and Logistics, M.S.C.M.

I.H. Asper School of Business
Dean: Dr. Bruno Silvestre
Associate Dean(s): Dr. B. Biscontri, Dr. S. Gagnon, Dr. L. Neville, Dr. S. Sivaramakrishnan, Dr. Z. Wu
Head: Dr. S. Gagnon
Campus Address/General Office: 501-181 Freedman Crescent
Telephone: 204-474-6732
Email Address: aspergradadvisor@umanitoba.ca
Website: umanitoba.ca/asper (http://umanitoba.ca/asper/)
Academic Staff: Please refer to the Asper website (https://umanitoba.ca/asper/asper-school-business/faculty/) for academic staff information.

Asper M.S.C.M Program Information

The Master of Supply Chain Management and Logistics is a professional master's program designed to prepare students for leadership positions within the broad field of supply chain management and logistics.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Registration (p. 100) section of this Calendar.

Asper M.S.C.M. Admission Requirements

To qualify for admission to the Master of Supply Chain Management and Logistics program, you must have a minimum of:

- A three#year bachelor degree from a post-secondary recognized educational institution (in any discipline)
- A 3.0 admission GPA (on 4.5 scale) on the last 60 credit hours of university degree#level study
- Results of the Graduate Management Admissions Test (GMAT) from within the past five years, with a minimum score of 550.
  - The GRE will be accepted with a percentile score across its components equivalent to the current acceptable percentile level of the GMAT. The percentile score on the quantitative section of the GMAT or GRE examinations must be at the 60th percentile or higher. GMAT and GRE scores must not be older than five years.
  - GMAT or GRE scores are not required for those applicants who have successfully completed a bachelor degree in any field of study from the University of Manitoba with a minimum 3.25 GPA and who have also:
    - achieved an average 3.5 GPA across the four Asper School of Business supply chain management courses counting toward the supply chain major requirements. All four courses must have been completed within the last five years from the term of admission (if courses are completed beyond five years from the term of admission, they may be counted, if the applicant can demonstrate, to the satisfaction of the Admissions Committee, that they have been working in a professional role that makes substantial use of this knowledge).
- One of the following English language proficiency test scores from within the past two years, if applicable:
  - **MELAB:** 80%
  - **TOEFL:** 86 (internet) Minimum score of 20 in each of reading, writing, listening and speaking categories.
  - **CanTEST:** 4.5 in listening and reading; band 4.0 in writing and oral interview
  - **IELTS:** 6.5 in the Academic Module with a minimum 6 on the speaking band
  - **AEPUCE:** 65%
  - **PTE:** (A) 61%

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.S.C.M. program of study (https://umanitoba.ca/explore/programs-of-study/master-supply-chain-management-and-logistics-mscm/) page.

Applicants who are Canadian citizens/Permanent Residents of Canada with transcripts from universities or colleges in countries other than Canada and the United States are strongly advised to apply at least two months prior to the standard deadlines.

Degree Requirements

The Master of Supply Chain Management and Logistics program is a hands-on degree with a practical component, which gives students the skills and knowledge required to work professionally in supply chain management and logistics fields.

The following are the courses required for degree completion (NOTE - a maximum of six (6) credit hours of exemptions are possible for the following courses if the equivalent course(s) were completed with a grade of B+ or higher in the Asper B.Comm. (Hons.) program within five years of starting the Master in Supply Chain Management and Logistics program - MSCI 2150 (Introduction to Management Sciences – 3 credit hours) equivalent to MSCI 7140 (Quantitative Analysis – 3 credit hours) and SCM 3360 (Supply Chain Logistics – 3 credit hours) equivalent to SCM 7040 (Logistics Management – 3 credit hours):

Course	Title	Hours
GMGT 7220	Managing People in Organizations	3
OPM 7120	Operations and Supply Chain Management	3
IDM 7120	Executive Leadership and Responsibilities	3
MSCI 7140	Quantitative Analysis for Management	3
OPM 7300	Topics in Advanced Production and Operations Management	3
OPM 7170	Project Management	3
GMGT 7230	Negotiations	3

OPM 7300	Topics in Advanced Production and Operations Management	3
OPM 7180	Sustainable Lean Management	3
SCM 7040	Logistics Management	3
SCM 7042	Purchasing and Procurement in Supply Chains	3
SCM 7044	Supply Relationship Management	3
OPM 7300	Topics in Advanced Production and Operations Management	3
SCM 7046	Sustainable Supply Chain Management	3
SCM 7048	Advanced Supply Chain Management	3
SCM 7050	Co-op in Supply Chain Management and Logistics	3
or SCM 7052	Applied Project in Supply Chain Management and Logistics	

Co-op Placement or Practicum

The Master of Supply Chain Management and Logistics degree includes a 4-month graduate co-op placement or practicum in which students gain hands-on experience in the supply chain management field. These placements are made possible by the Stu Clark graduate school's network of connections within Manitoba and across Canada.

Progression Chart

Course	Title	Hours
Year 1		
GMGT 7220	Managing People in Organizations	3
OPM 7120	Operations and Supply Chain Management	3
IDM 7120	Executive Leadership and Responsibilities	3
MSCI 7140	Quantitative Analysis for Management	3
OPM 7300	Topics in Advanced Production and Operations Management	3
OPM 7170	Project Management	3
GMGT 7230	Negotiations	3
OPM 7300	Topics in Advanced Production and Operations Management	3
OPM 7180	Sustainable Lean Management	3
	Hours	**27**
Year 2		
SCM 7040	Logistics Management	3
SCM 7042	Purchasing and Procurement in Supply Chains	3
SCM 7044	Supply Relationship Management	3
OPM 7300	Topics in Advanced Production and Operations Management	3
SCM 7046	Sustainable Supply Chain Management	3
SCM 7048	Advanced Supply Chain Management	3
SCM 7050 or SCM 7052	Co-op in Supply Chain Management and Logistics or Applied Project in Supply Chain Management and Logistics	3
	Hours	**21**
	Total Hours	**48**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Clayton H. Riddell Faculty of Environment, Earth, and Resources

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Earth Sciences, M.Sc. (p. 136)	2	9	
Earth Sciences, Ph.D. (p. 137)	4	12	
Environment and Geography, M.Env. (p. 139)	2	12	
Environment and Geography, M.Sc. (p. 140)	2	12	
Geography, M.A. (p. 141)	2	12	
Geography, Ph.D. (p. 142)	4	12	
Natural Resources and Environmental Management, Ph.D. (p. 143)	4	12-21	
Natural Resources Management, M.N.R.M. (p. 145)	2	21-30	

Earth Sciences, M.Sc.

Earth Sciences
Head: Dr. Alfredo Camacho
Campus Address/General Office: 240 Wallace Building
Telephone: 204-474-9371
Fax: 204-474-7623
Email Address: Riddell.Graduate@umanitoba.ca
Website: umanitoba.ca/environment-earth-resources/earth-sciences (https://umanitoba.ca/environment-earth-resources/earth-sciences/)
Academic Staff: Please refer to the Riddell website (https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-geological-sciences) for Faculty information.

Earth Sciences M.Sc. Program Information

The Master of Science program requires completion of a minimum of 9 credit hours of approved courses, and a research project and thesis.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Earth Sciences M.Sc. Admission Requirements

The normal entry requirement is the equivalent of an Honours B.Sc. degree in Earth Sciences from the University of Manitoba. Students with honours degrees in related disciplines (such as Geography, Soil Science, Biology, Chemistry, Environmental Science, Physics, Mathematics, Engineering Physics, and Earth, Civil and Electrical Engineering) may be accepted by the Graduate Admissions Committee providing their planned degree program involves studies in the Earth sciences. The majority of the required courses taken by the student should normally be from the Department of Earth Sciences. The research should also be in the Earth sciences

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Earth Sciences program of study (https://umanitoba.ca/explore/programs-of-study/earth-sciences-msc/) page.

Degree Requirements

Program Requirements

The M.Sc. program requires a thesis plus a minimum of 9 credit hours which includes:

Course	Title	Hours
GEOL 7760	Seminar in Geological Sciences	3
Select a minimum of 6 credit hours of approved courses at the 7000 level		6
Total Hours		**9**

Depending on the student's background and needs, the Advisory Committee may assign additional courses at the 3000 level or above.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GEOL 7760	Seminar in Geological Sciences	3
7XXX	Approved courses at 7000 level	6
3XXX or above	Additional courses at 3000 level or above as assigned by the Advisory Committee	
	Hours	**9**

Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**9**

Coursework is normally completed in Year 1, and thesis is normally completed Year 2 – 3. Adjustments may be made with the supervisor's consultation and approval.

Students are required to complete a M.Sc. thesis proposal (normally within 8 months of start of program). The proposal must include an introduction with citation of relevant literature, the research objectives, the proposed methodology including a timetable, the anticipated significant of the research, and references. A proposed budget must be appended to the proposal.

Students are required to submit a report (proposals, results and timetable of thesis work) to the Head on or before February 1 annually. The report is generally 1 to 2 pages in length.

Students must produce a thesis that is appropriate for the M.Sc. degree being sought and must successfully defend their thesis as determined by the assigned examining committee. Further information on the format is available from the Department of Earth Sciences.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and present a completed Program Form to the administrative assistant. The selection of courses and changes in a student's program must be approved by their advisor in the case of Master's students or their advisory committee in the case of doctoral students.

Students should consult the administrative assistant regarding the schedule of graduate course offerings in the department. Please note that some courses require a field component to be run before lectures begin in the fall. Courses with insufficient enrolment may be cancelled well in advance of the first week of lectures.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Earth Sciences, Ph.D.

Earth Sciences
Head: Dr. Alfredo Camacho
Campus Address/General Office: 240 Wallace Building
Telephone: 204-474-9371
Fax: 204-474-7623
Email Address: Riddell.Graduate@umanitoba.ca
Website: umanitoba.ca/environment-earth-resources/earth-sciences (https://umanitoba.ca/environment-earth-resources/earth-sciences/)
Academic Staff: Please refer to the Riddell website (https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-geological-sciences) for Faculty information.

Earth Sciences Ph.D. Program Information

The Doctor of Philosophy program requires completion of a minimum of 12 credit hours of approved courses, and a research project and thesis.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Earth Sciences Ph.D. Admission Requirements

The normal entry requirement is the equivalent of a M.Sc. in Earth Sciences. Students with M.Sc. degrees in related fields may be accepted by the Graduate Admissions Committee providing their planned degree program involves studies in the Earth Sciences. The majority of the required courses taken by the student should normally be in the Department of Earth Sciences. The research should also be in the Earth sciences.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Earth Sciences program of study (https://umanitoba.ca/explore/programs-of-study/earth-sciences-phd/) page.

Degree Requirements

Program Requirements

The Department of Earth Sciences requires that where admission to the Ph.D. program is directly from a Master's degree, a thesis plus the following is required for a total of a minimum of 12 credit hours:

Course	Title	Hours
GEOL 7760	Seminar in Geological Sciences	3
Select a minimum of 9 credit hours (minimum 6 at the 7000 level, maximum 3 at the 3000 or 4000 level)		9
Total Hours		**12**

In the case of admission to the Ph.D. without a Master's degree, a thesis plus the following is required for a total of a minimum of 15 credit hours:

Course	Title	Hours
GEOL 7760	Seminar in Geological Sciences	3
Select a minimum of 12 credit hours (minimum 9 at the 7000 level, maximum 3 at the 3000 or 4000 level)		12
Total Hours		**15**

Expected Time to Graduate: 4 years

Progression Chart

Ph.D. in Earth Sciences (with M.Sc. degree)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**0**
Years 1-2		
GEOL 7760	Seminar in Geological Sciences (continues each term)	3
Select 9 credit hours from the following:		9
7XXX	Approved courses at 7000 level (6 min credit hours)	
3XXX or 4XXX	Approved courses at 3000 or 4000 level (3 max credit hours)	
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**12**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

Ph.D. in Earth Sciences (transfer from Master's program or admitted without Master's degree)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**0**
Years 1-2		
GEOL 7760	Seminar in Geological Sciences (continues each term)	3
Select 12 credit hours of the following:		12
7XXX	Approved courses at 7000 level (9 min credit hours)	
3XXX or 4XXX	Approved courses at 3000 or 4000 level (3 max credit hours)	
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**15**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**15**

Coursework is normally completed in the first 2 years, and thesis is normally completed Year 4–5. Adjustments may be made with the supervisor's consultation and approval.

Students are required to complete a Ph.D. thesis proposal (normally within 12 months of start of program). The proposal must include an introduction with citation of relevant literature, the research objectives, the proposed methodology including a timetable, the anticipated significant of the research, and references. A proposed budget must be appended to the proposal.

Students are required to submit a report (proposals, results and timetable of thesis work) to the Head on or before February 1 annually. Reports are generally 1 to 2 pages in length.

Students must produce a thesis that is appropriate for the Ph.D. degree being sought and must successfully defend their thesis as determined by the assigned examining committee.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and present a completed Program Form to the administrative assistant. The selection of courses and changes in a student's program must be approved by their advisor in the case of Master's students or their advisory committee in the case of doctoral students.

Students should consult the administrative assistant regarding the schedule of graduate course offerings in the department. Please note that some courses require a field component to be run before lectures begin in the fall. Courses with insufficient enrolment may be cancelled well in advance of the first week of lectures.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Environment and Geography, M.Env.

Environment and Geography
Head (Acting): Dr. Michael Campbell
Campus Address/General Office: 220 Sinnott Building
Telephone: 204-474-9667
Email Address: Riddell.Graduate@umanitoba.ca
Website: umanitoba.ca/environment-earth-resources/environment-and-geography (https://umanitoba.ca/environment-earth-resources/environment-and-geography/)
Academic Staff: Please refer to the website for Faculty information: umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography (https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography)

Environment & Geography M.Env. Program Information

The Master of Environment is an interdisciplinary program focusing on basic and applied research that deals with the complex relationships between the environment, earth, natural resources, and society at large.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Environment & Geography M.Env. Admission Requirements

Students must have a minimum GPA of 3.25 in the last 60 credit hours of course work. Applicants with an honours degree or equivalent (including a 4-year advanced degree) in Geography, Environmental Sciences, and/or Environmental Studies or related areas will be considered. Students must be accepted by an advisor prior to submitting an application to enter the program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Environment & Geography M.Env. program of study (https://umanitoba.ca/explore/programs-of-study/master-environment-menv/) page.

Degree Requirements

Master's students are required to complete at least 12 credit hours as follows:

Course	Title	Hours
GEOG 7610	Graduate Seminar in E&G (Masters)	3
Select 6 credit hours from the 7000 level		6
Select 3 credit hours of any other course at the 3000-level or higher		3
Total Hours		**12**

All students must complete and orally defend a thesis that makes a distinctive contribution to the fields of environment and/or geography.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
First Term		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Other Requirements		
Select 9 credit hours of the following:		9
3XXX or 4XXX	Courses at 3000 or 4000 level (3 max credit hours)	
7XXX	Courses at the graduate level (6 min credit hours)	
GEOG 7610	Graduate Seminar in E&G (Masters)	3
GRAD 7000	Master's Thesis	0
Total Hours		**12**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with their program advisor/thesis supervisor to determine their course selections. Courses must be listed on the Departmental Registration Approval Form (available from the departmental office) and written approval from the advisor and department head or designate must be obtained. Students are also responsible for obtaining any instructor or special permission which may be required for certain courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Environment and Geography, M.Sc.

Environment and Geography
Head (Acting): Dr. Michael Campbell
Campus Address/General Office: 220 Sinnott Building
Telephone: 204-474-9667
Email Address: Riddell.Graduate@umanitoba.ca
Website: umanitoba.ca/environment-earth-resources/environment-and-geography (https://umanitoba.ca/environment-earth-resources/environment-and-geography/)
Academic Staff: Please refer to the website for Faculty information: umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography (https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography)

Environment & Geography M.Sc. Program Information

The Master of Science program is an integrative graduate program option for those interested in furthering their academic training in the areas of environmental sciences, including physical geography.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Environment & Geography M.Sc. Admission Requirements

Students must have a minimum GPA of 3.25 in the last 60 credit hours of course work. Applicants with an honours degree or equivalent (including a 4-year advanced degree) in Geography (physical geography specialization) or from a program in the Earth or environmental sciences will be considered. Students must be accepted by an advisor prior to submitting an application to enter the program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Sc. Environment & Geography program of study (https://umanitoba.ca/explore/programs-of-study/environment-and-geography-msc/) page.

Degree Requirements

Master's students are required to complete at least 12 credit hours as follows:

Course	Title	Hours
GEOG 7610	Graduate Seminar in E&G (Masters)	3
Select 6 credit hours from the 7000 level		6
Select 3 credit hours of any other course at the 3000-level or higher		3
Total Hours		**12**

All students must complete and orally defend a thesis that makes a distinctive contribution to the fields of environment and/or geography.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
First Term		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Other Requirements		

Select 9 credit hours of the following:		9
3XXX or 4XXX	Courses at 3000 or 4000 level (3 max credit hours)	
7XXX	Courses at the graduate level (6 min credit hours)	
GEOG 7610	Graduate Seminar in E&G (Masters)	3
GRAD 7000	Master's Thesis	0
Total Hours		**12**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with their program advisor/thesis supervisor to determine their course selections. Courses must be listed on the Departmental Registration Approval Form (available from the departmental office) and written approval from the advisor and department head or designate must be obtained. Students are also responsible for obtaining any instructor or special permission which may be required for certain courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Geography, M.A.

Environment and Geography
Head (Acting): Dr. Michael Campbell
Campus Address/General Office: 220 Sinnott Building
Telephone: 204-474-9667
Email Address: Riddell.Graduate@umanitoba.ca
Website: umanitoba.ca/environment-earth-resources/environment-and-geography (https://umanitoba.ca/environment-earth-resources/environment-and-geography/)
Academic Staff: Please refer to the website for Faculty information: umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography (https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography)

Environment & Geography M.A. Program Information

The Master of Arts (Geography) is an integrative graduate program studying the dynamic character, spatial organization and interrelationships among the human and physical characteristics at, and near the Earth's surface.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Environment & Geography M.A. Admission Requirements

Students must have a minimum GPA of 3.25 in the last 60 credit hours of course work. Applicants with an honours degree or equivalent (including a 4-year advanced degree) in Geography (human geography specialization) or from an allied discipline will be considered. Students must be accepted by an advisor prior to submitting an application to enter the program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.A. Geography program of study (https://umanitoba.ca/explore/programs-of-study/geography-ma/) page.

Degree Requirements

Master's students are required to complete at least 12 credit hours as follows:

Course	Title	Hours
GEOG 7610	Graduate Seminar in E&G (Masters)	3
Select 6 credit hours from the 7000 level		6

Select 3 credit hours of any other course at the 3000-level or higher	3
Total Hours	**12**

All students must complete and orally defend a thesis that makes a distinctive contribution to the fields of environment and/or geography.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
First Term		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Other Requirements		
Select 9 credit hours of the following:		9
3XXX or 4XXX	Courses at 3000 or 4000 level (3 max credit hours)	
7XXX	Courses at the graduate level (6 min credit hours)	
GEOG 7610	Graduate Seminar in E&G (Masters)	3
GRAD 7000	Master's Thesis	0
Total Hours		**12**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with their program advisor/thesis supervisor to determine their course selections. Courses must be listed on the Departmental Registration Approval Form (available from the departmental office) and written approval from the advisor and department head or designate must be obtained. Students are also responsible for obtaining any instructor or special permission which may be required for certain courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Geography, Ph.D.

Environment and Geography
Head (Acting): Dr. Michael Campbell
Campus Address/General Office: 220 Sinnott Building
Telephone: 204-474-9667
Email Address: Riddell.Graduate@umanitoba.ca
Website: umanitoba.ca/environment-earth-resources/environment-and-geography (https://umanitoba.ca/environment-earth-resources/environment-and-geography/)
Academic Staff: Please refer to the website for Faculty information: umanitoba.ca/environment-earth-resources/faculty-staff#department-of-environment-and-geography (https://umanitoba.ca/environment-earth-resources/faculty-staff/#department-of-environment-and-geography)

Environment & Geography Ph.D. Program Information

The Doctor of Philosophy includes research tracks in the fields of Geography (Human and Physical), Environmental Science, and Environmental Studies.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Environment & Geography Ph.D. Admission Requirements

A 3.5 GPA (or equivalent) in their previous 60 credit hours (or two years of studies for international transcripts) of coursework is normally required. In addition, the prospective student should have or be completing a research driven thesis-based Masters degree in Geography, Environmental Sciences, Environmental Studies and/or related areas. Students must be accepted by an advisor prior to submitting an application to enter the program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Geography program of study (https://umanitoba.ca/explore/programs-of-study/geography-phd/) page.

Degree Requirements

Students are also required to pass a candidacy exam, and complete and successfully defend a dissertation. The dissertation is to be a distinctive contribution to the field and must be of publishable quality.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
First Term		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial [1]	0
Other Requirements		
7XXX	Courses at the graduate level	9
GEOG 7620	Graduate Seminar in E&G (PhD 1)	1.5
GEOG 7630	Graduate Seminar in E&G (PhD 2)	1.5
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
Total Hours		**12**

[1] Unless completed previously in a Master's program, without any intervening terms out of university.

3 Year Ph.D. in Geography

(transfers from Master's program or admitted without Master's degree)

Course	Title	Hours
First Term		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial [1]	0
Other Requirements		
Select 21 credit hours of the following:		21
3XXX or 4XXX	Courses at 3000 or 4000 level (6 max credit hours)	
7XXX	Courses at the graduate level (15 min credit hours)	
GEOG 7620	Graduate Seminar in E&G (PhD 1)	1.5
GEOG 7630	Graduate Seminar in E&G (PhD 2)	1.5
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
Total Hours		**24**

[1] Unless completed previously in a Master's program, without any intervening terms out of university.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with their program advisor/thesis supervisor to determine their course selections. Courses must be listed on the Departmental Registration Approval Form (available from the departmental office) and written approval from the advisor and department head or designate must be obtained. Students are also responsible for obtaining any instructor or special permission which may be required for certain courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Natural Resources and Environmental Management, Ph.D.

Natural Resources Institute
Head: Dr. John Sinclair
Campus Address/General Office: 220 Sinnott Building
Telephone: 204-474-8373
Fax: 204-261-0038

Email Address: nriinfo@umanitoba.ca
Website: umanitoba.ca/environment-earth-resources/natural-resources-institute (https://umanitoba.ca/environment-earth-resources/natural-resources-institute/)
Academic Staff: Please refer to the NRI website (https://umanitoba.ca/environment-earth-resources/faculty-staff/) for academic staff information.

Natural Resources Management Ph.D. Program Information

The Doctor of Philosophy program is aimed at developing independent researchers in the areas of natural resources and the environment.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Natural Resources Management Ph.D. Admission Requirements

An applicant should have a high academic standing in previous university work, a Master's degree in a related discipline, as determined by the NRI Selection Committee, and an area of research interest that may be supported by an NRI faculty member. Students must be accepted by an advisor prior to submitting an application to enter the program. A 3.5 GPA (or equivalent) in their most recent 60 credit hours of coursework and evidence of scholarly ability are required.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Natural Resources Management Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/natural-resources-and-environmental-management-phd/) page.

Degree Requirements

Program Requirements

PhD students entering with a Master's degree may take up to 21 credit hours in total. Students must take NRI 7310 Ph.D. Thesis Research Seminar (3). A minimum of 6 credit hours of courses must be completed within the Natural Resources Institute. The remaining 9 credit hours of 7000 level NRI electives will usually include one of:

- NRI 7222 Human Dimensions of Natural Resources and Environmental Management (3)
- NRI 7232 Ecological Dimensions of Resource and Environmental Management (3)
- NRI 7182 Sustainability, Economics, and Natural Resources (3)

unless credit has already been received for one of the three courses above.

Individual programs of study will vary from student to student depending on each student's research interest and the recommendations of each student's advisor and Ph.D. advisory committee. Students will be encouraged to use the pool of Natural Resources Institute required and elective courses as well as appropriate graduate courses available outside of the Natural Resources Institute in order to select the best set of courses to complement their programs.

Student academic progress will be reported annually to the Faculty of Graduate Studies. A minimum Grade Point Average of 3.0, with no grade below C+, must be maintained in order to continue in the program.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select a minimum of 6 credit hours of NRI courses and select a minimum of 12 and maximum of 21 credit hours of the following or other U of M courses at the 7000 level or above:		12-21
NRI 7310	Ph.D. Thesis Research Seminar (Required)	
NRI 7070	Readings in Natural Resources Management 1	
NRI 7080	Readings in Natural Resources Management 2	
NRI 7110	Field Seminar	
NRI 7160	Projects in Natural Resources Management 1	
NRI 7170	Projects in Natural Resources Management 2	
NRI 7180	Sustainable Development and Natural Resources	
NRI 7182	Sustainability, Economics, and Natural Resources	
NRI 7190	Natural Resources Administration and Law	
NRI 7200	The Role of Information Management in Sustainable Resource Use	
NRI 7222	Human Dimensions of Natural Resources and Environmental Management	
NRI 7232	Ecological Dimensions of Resource and Environmental Management	
NRI 7242	Resource and Environmental Management Policy	
NRI 7252	Environmental Management Practice	
NRI 7290	Environmental Impact Assessment	
NRI 7302	Conservation Biology and Biodiversity Management	
NRI 7320	Environmental Risk and Hazards	
NRI 7330	Water Resources: Analysis, Planning and Management	
NRI 7340	Environmental Justice and Ecosystem Health	
NRI 7350	Study Design and Quantitative Methods for Resource and Environmental Management	
NRI 7360	Qualitative Field Methods for Community-based Resource and Environmental Management	

NRI 7370	Sustainable Livelihoods, Food Resources and Community Food Security	
	Hours	**12-21**
Year 2		
Doctoral Thesis		0
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
	Total Hours	**12-21**

The proposal, Candidacy Exam, first draft and oral defence meetings are required. The proposal meeting is held in year 1 followed by data collection, analysis and writing. The Candidacy exam takes place during the second year. For more information on the thesis process, please refer to the PhD student Handbook at the Natural Resources Institute.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and newly admitted students to the Natural Resources Institute are required to see their faculty advisor to complete their Degree Requirement form prior to attempting to register. Appointments can be made by calling the general office. Only courses that have been approved by the faculty advisor will be credited to a student's program.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Natural Resources Management, M.N.R.M.

Natural Resources Institute
Head: Dr. John Sinclair
Campus Address/General Office: 220 Sinnott Building
Telephone: 204-474-8373
Fax: 204-261-0038
Email Address: nriinfo@umanitoba.ca
Website: https://umanitoba.ca/environment-earth-resources/natural-resources-institute (https://umanitoba.ca/environment-earth-resources/natural-resources-institute/)
Academic Staff: Please refer to our website (https://umanitoba.ca/environment-earth-resources/faculty-staff/) for academic staff information.

M.N.R.M. Program Information

The Master or Natural Resources Management program in natural resources management combines a broad commitment to sustainability with development of well-focused, practical expertise.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.N.R.M. program of study (https://umanitoba.ca/explore/programs-of-study/natural-resources-management-mnrm/) page.

Degree Requirements

Program Requirements

Students follow an individual study plan that includes a minimum of 21 credit hours (12 credit hours of required course work plus 9 credit hours of elective courses), with the option of up to 30 credit hours, plus a thesis or practicum.

The compulsory courses for the MNRM thesis and practicum streams are:

- NRI 7222 Human Dimensions of Natural Resources and Environmental Management (3)

- NRI 7232 Ecological Dimensions of Resource and Environmental Management (3)
- NRI 7182 Sustainability, Economics, and Natural Resources (3)

In addition:

Thesis Stream

- NRI 7262 Master's Thesis Research Seminar (3)

or

Practicum Stream

- NRI 7380 Project Management in Natural Resources and Environmental Management (3)

The central academic agenda of the required set of courses includes: Assessment of the theoretical foundations and practical applications of progress toward sustainable management of natural resources; understanding of ecosystems as self-organizing and responding systems; examination of conventional and alternative social arrangements, including institutions and tools of governance, as a means of improving human well-being and environmental responsibility; and exposure to theories of resource and environmental management processes and tools.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select 12 credit hours from the following required courses:		12
NRI 7222	Human Dimensions of Natural Resources and Environmental Management	
NRI 7232	Ecological Dimensions of Resource and Environmental Management	
NRI 7262 or NRI 7380	Master's Thesis Research Seminar or Project Management in Natural Resources and Environmental Management	
NRI 7182	Sustainability, Economics, and Natural Resources	
Select 9 to 18 credit hours from the following; or, other U of M courses at the 3000 level or above: [1]		9-18
NRI 7160	Projects in Natural Resources Management 1	
NRI 7170	Projects in Natural Resources Management 2	
NRI 7110	Field Seminar	
NRI 7180	Sustainable Development and Natural Resources	
NRI 7190	Natural Resources Administration and Law	
NRI 7200	The Role of Information Management in Sustainable Resource Use	
NRI 7242	Resource and Environmental Management Policy	
NRI 7252	Environmental Management Practice	
NRI 7290	Environmental Impact Assessment	
NRI 7302	Conservation Biology and Biodiversity Management	
NRI 7320	Environmental Risk and Hazards	
NRI 7330	Water Resources: Analysis, Planning and Management	
NRI 7340	Environmental Justice and Ecosystem Health	
NRI 7350	Study Design and Quantitative Methods for Resource and Environmental Management	
NRI 7360	Qualitative Field Methods for Community-based Resource and Environmental Management	
NRI 7370	Sustainable Livelihoods, Food Resources and Community Food Security	
NRI 7070	Readings in Natural Resources Management 1	
NRI 7080	Readings in Natural Resources Management 2	
	Hours	**21-30**
Year 2		
GRAD 7000 or GRAD 7030	Master's Thesis or Master's Practicum	0
GRAD 7020	Master's Re-registration	0
	Hours	**0**
	Total Hours	**21-30**

[1] At least 6 of the 9-18 NRI course credit hours must come from this list.

Most students do not complete all courses in the first year. The thesis committee is set up and the proposal meeting takes place.

The proposal, first draft and oral defence meetings are required. The proposal meeting is held in year 1 followed by data collection, analysis and writing in year 2 leading to a first draft meeting followed by the oral defence document. For more information on the thesis process, please refer to the MNRM student Handbook at the Natural Resources Institute.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and newly admitted students to the Natural Resources Institute are required to see their faculty advisor to complete their Degree Requirement form prior to attempting to register. Appointments can be made by calling the general office. Only courses that have been approved by the faculty advisor will be credited to a student's program.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult

unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Faculty of Agricultural and Food Sciences

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Agribusiness and Agricultural Economics, M.Sc. (p. 147)	2	Varies	
Animal Science, M.Sc. (p. 150)	2	12	
Animal Science, Ph.D. (p. 151)	3	9	
Applied Human Nutrition, M.A.H.N. (p. 152)	1	30	
Biosystems Engineering, M.Eng. (p. 153)	1	30	
Biosystems Engineering, M.Sc. (p. 154)	2	12	
Biosystems Engineering, Ph.D. (p. 155)	4	12	
Entomology, M.Sc. (p. 157)	2-3	6	
Entomology, Ph.D. (p. 158)	3-5	6	
Food Science, M.Sc. (p. 159)	2	12	
Food Science, Ph.D. (p. 161)	3.5	6	
Human Nutritional Sciences, M.Sc. (p. 162)	2	12	
Human Nutritional Sciences, Ph.D. (p. 163)	4	18	
Plant Science, M.Sc. (p. 164)	2	12	
Plant Science, Ph.D. (p. 165)	3-4	12	
Soil Science, M.Sc. (p. 167)	2	12	
Soil Science, Ph.D. (p. 168)	3-4	6	

Agribusiness and Agricultural Economics, M.Sc.

Agribusiness & Agricultural Economics
Head: Derek G. Brewin
Grad Chair: Julieta Frank
Campus Address/General Office: 352 Agriculture Building
Telephone: 204-474-9384
Fax: 204-261-7251
Email Address: agribusiness@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/agribusiness-and-agricultural-economics (https://umanitoba.ca/agricultural-food-sciences/agribusiness-and-agricultural-economics/)
Academic Staff: Please refer to the Faculty of Agricultural and Food Sciences website (https://umanitoba.ca/agricultural-food-sciences/agribusiness-and-agricultural-economics/agribusiness-and-agricultural-economics-faculty-and-staff/)

Agribusiness & Agricultural Economics Program Information

The Master of Science thesis-based program consists of a combination of coursework and a research component.

A Ph.D. in Economics (Economics and Econometrics Stream) (p. 186) with a research specialization in Agribusiness and Agricultural Economics is offered by the Department of Economics in the Economics and Econometrics Stream with the cooperation of the Department of Agribusiness and Agricultural Economics.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Agribusiness & Agricultural Economics M.Sc. Admission Requirements

Applicants normally require a Bachelor of Science in Agribusiness or a four year Bachelor's degree (or equivalent) in Economics. The following courses or their equivalents are prerequisites to the graduate program:

Course	Title	Hours
MATH 1300	Vector Geometry and Linear Algebra (or an equivalent course in Matrices and Linear Algebra)	3
MATH 1500	Introduction to Calculus (or an equivalent course in Calculus)	3
ECON 2010	Microeconomic Theory 1 (or an equivalent course in microeconomics)	3
ECON 2020	Macroeconomic Theory 1 (or an equivalent course in macroeconomics)	3
ABIZ 3080	Introduction to Econometrics (or an equivalent course in econometrics)	3
The following courses are not required, but may be recommended:		
ECON 3010	Microeconomic Theory 2 (or an equivalent course in microeconomics)	
ECON 3020	Macroeconomic Theory 2 (or an equivalent course in macroeconomics)	

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Agribusiness & Agricultural Economics M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/agribusiness-and-agricultural-economics-msc/) page.

Degree Requirements

The M.Sc. program has three streams:

1. Agricultural Economics
2. Agribusiness
3. Environmental and Resource Economics

All students will be automatically entered into the Agricultural Economics stream and will require approval to move into the Agribusiness or Environmental and Resource Economics streams. Within each stream there is a thesis and a comprehensive option.

Thesis Route

Students must complete a minimum of 18 credit hours of coursework. Of these 18 credit hours, a minimum of 9 credit hours must be at the 7000 level. Other coursework will normally be at the 7000 level as well. Any exceptions to specific course requirements must be approved by the Department Graduate Advisory Committee (DGAC). Students must submit an acceptable thesis and pass a thesis oral examination as well as present two graduate seminars open to the public. The first presentation will be on the thesis proposal, and the second presentation will be on the completed research. The thesis must be in the area of the student's selected stream.

Comprehensive Examination Route

Students must complete a minimum of 27 credit hours of coursework with at least 18 credit hours at the 7000 level. Other course work will normally be at the 7000 level as well. Any exceptions to specific course requirements must be approved by the Department Graduate Advisory Committee (DGAC). All students in the comprehensive option must complete a research paper and pass a comprehensive examination based primarily on the paper. These students must present a graduate seminar open to the public based on the completed research. The research paper must be in the area of the student's selected stream.

Expected Time to Graduate: 2 years

Progression Chart

Thesis Route

Agricultural Economics Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following:		3-6
ABIZ 7940 & ABIZ 7950	Production Economics and Advanced Agricultural Demand Analysis	
ECON 7722	Advanced Microeconomic Theory I	
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics as approved by Advisor)	
Select additional courses as approved by Advisor		9-12
GRAD 7000	Master's Thesis	0
Total Hours		**12-18**

Agribusiness Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ABIZ 7410	Agricultural Finance	3

XXXX 7XXX	Additional courses in Agribusiness or related area as approved by Advisor	6
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
Select additional courses as approved by Advisor		6
GRAD 7000	Master's Thesis	0
Total Hours		**18**

Environmental and Resource Economics Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following:		3-6
ABIZ 7940 & ABIZ 7950	Production Economics and Advanced Agricultural Demand Analysis	
ECON 7722	Advanced Microeconomic Theory I	
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
ABIZ 7430	Advanced Theory of Resource Economics	3
Select an additional course related to Environment and Resources as approved by Advisor		3
Select additional course(s) as approved by Advisor		3-6
GRAD 7000	Master's Thesis	0
Total Hours		**15-21**

Comprehensive Examination Route

Agricultural Economics Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following:		3-6
ABIZ 7940 & ABIZ 7950	Production Economics and Advanced Agricultural Demand Analysis	
ECON 7722	Advanced Microeconomic Theory I	
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
Select additional courses as approved by Advisor		18-21
GRAD 7010	Comprehensive Examination	0
Total Hours		**24-30**

Agribusiness Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ABIZ 7410	Agricultural Finance	3
XXXX 7XXX	Additional courses in Agribusiness or related area as approved by Advisor	6
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
Select additional courses as approved by Advisor		15
GRAD 7010	Comprehensive Examination	0
Total Hours		**27**

Environmental and Resource Economics Stream

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following:		3-6
ABIZ 7940 & ABIZ 7950	Production Economics and Advanced Agricultural Demand Analysis	
ECON 7722	Advanced Microeconomic Theory I	
XXXX 7XXX	Quantitative Methods (Econometrics, Management Science, or Statistics) as approved by Advisor	3
ABIZ 7430	Advanced Theory of Resource Economics	3
Select an additional course related to Environment and Resources as approved by Advisor		3
Select additional courses as approved by Advisor		12-15
GRAD 7010	Comprehensive Examination	0
Total Hours		**24-30**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

New and returning students must meet with their program advisor to determine courses prior to registration. Courses must be listed on the departmental approval form available from the Graduate Studies Assistant, and written approval granted from both the advisor and the department head or designate. Students may only register for courses listed and approved at that time. Any course revisions (additions and/or withdrawals) must be approved in the same manner. The signed form must be submitted to the Graduate Studies Assistant, who will then complete the registration process.

Not all courses are offered each year.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Animal Science, M.Sc.

Animal Science
Head (Acting): Kim Ominski
Grad Chair: Karmin O
Campus Address/General Office: 201 Animal Science Building
Telephone: 204-474-9383
Fax: 204-474-7628
Email Address: animal_science@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/animal-science (https://umanitoba.ca/agricultural-food-sciences/animal-science/)
Academic Staff: Please refer to the Animal Science website (https://umanitoba.ca/agricultural-food-sciences/animal-science/animal-science-faculty-and-staff/) for Faculty listing

Animal Science M.Sc. Program Information

The Master of Science thesis-based program consists of a combination of coursework and a research component with focus in behaviour, genetics, nutrition or physiology of farm animals.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Animal Science M.Sc. Admission Requirements

Applicants normally require a Bachelor of Science in Agriculture degree with a major in Animal Science. Students with other degrees (B.Sc. Honours or General) may be accepted and in these instances students, depending on their academic background, may be required to complete a pre-Master's program or to register for courses additional to those normally required in the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Animal Science M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/animal-science-msc/) page.

Degree Requirements

Thesis Route

Students must complete a minimum of 9 credit hours of coursework plus ANSC 7140 (12 credit hours in total). Of these 12 credit hours, a minimum of 6 credit hours must be at the 7000 level in the major subject. A minimum of 3 credit hours must be taken in an ancillary subject. Students must submit an acceptable thesis and pass a thesis oral examination.

Comprehensive Examination Route

Students must complete a minimum of 30 credit hours of coursework plus ANSC 7140 (33 credit hours in total). Of these 33 credit hours, 12-18 credit hours must be in the major subject at the 7000 level, and 6-12 credit hours must be in an ancillary subject. The remaining required credit hours are to be made up of electives determined in consultation with the Advisory Committee. A comprehensive examination is required.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANSC 7140	Animal Science Seminar	3
ANSC 7XXX	Major subject 7000 level	6
Select an ancillary subject course at the 3000 level or higher		3
GRAD 7000	Master's Thesis	0
Total Hours		**12**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/advisory committee to determine courses. Courses must be listed on the departmental approval form (available from the Animal Science General Office) and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in a like manner.

Not all courses are offered each year.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Animal Science, Ph.D.

Animal Science
Head (Acting): Kim Ominski
Grad Chair: Karmin O
Campus Address/General Office: 201 Animal Science Building
Telephone: 204-474-9383
Fax: 204-474-7628
Email Address: animal_science@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/animal-science (https://umanitoba.ca/agricultural-food-sciences/animal-science/)
Academic Staff: Please refer to the Animal Science website (https://umanitoba.ca/agricultural-food-sciences/animal-science/animal-science-faculty-and-staff/) for Faculty listing

Animal Science Ph.D. Program Information

The department offers graduate programs leading to the M.Sc. and Ph.D. degrees in behaviour, genetics, nutrition or physiology of farm animals.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Animal Science Ph.D. Admission Requirements

A candidate must normally complete a M.Sc. degree before entering the Ph.D. program, however, exceptional applicants with an honours Bachelor's degree or equivalent may be permitted to enter the Ph.D. program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Animal Science Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/animal-science-phd/) page.

Degree Requirements

Directly from M.Sc.

Students must complete 6 credit hours of courses at the 7000 level in addition to ANSC 7390 (9 credit hours in total). Students must pass a candidacy exam, submit an acceptable thesis and pass a thesis oral examination.

Directly from Honours Bachelor or transfer from M.Sc.

Students must complete 12 credit hours of courses at the 7000 level in addition to ANSC 7390 (15 credit hours in total). Students must pass a candidacy exam, submit an acceptable thesis and pass a thesis oral examination.

Expected Time to Graduate: 3 years (if continuing from an M.Sc. program).

Progression Chart

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANSC 7390	Advanced Animal Science Seminar	3
XXXX 7XXX	7000 level course(s)	6
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
Total Hours		**9**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/advisory committee to determine courses. Courses must be listed on the departmental approval form (available from the Animal Science General Office) and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in a like manner.

Not all courses are offered each year.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Applied Human Nutrition, M.A.H.N.

Food and Human Nutritional Sciences
Head: Dr. Cristina Rosell
Associate Head (Dietetics): Dr. Semone Myrie
Campus Address/General Office: W575 Duff Roblin Building
Telephone: 204-474-6874
Fax: 204-474-7593
Email Address: MAHN.info@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/food-and-human-nutritional-sciences (https://umanitoba.ca/agricultural-food-sciences/food-and-human-nutritional-sciences/)
Academic Staff: Please visit our Academic Staff webpage (https://umanitoba.ca/agricultural-food-sciences/food-human-nutritional-sciences-faculty-and-staff/#academic-staff)

Applied Human Nutrition Program Information

The Master of Applied Human Nutrition (MAHN) is a one-year Master's program that provides the practicum program needed for students to become Registered Dietitians (RD) in Canada.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (https://catalog.umanitoba.ca/graduate-studies/academic-guide/application-admission-registration-policies/).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (https://catalog.umanitoba.ca/graduate-studies/academic-guide/masters-degrees-general-regulations/#Admission_FGSMasters) section of the Guide.

Applied Human Nutrition M.A.H.N. Admission Requirements

Applicants must have completed/will complete:

- an accredited undergraduate degree program before June 30 of the intake year and within the last 3 years; or
- have an academic assessment by the College of Dietitians of Manitoba (CDM) demonstrating equivalency and/or upgrading requirements (if any) have been met.

It is strongly recommended that applicants have a minimum grade of B or equivalent in all upper level 3000/4000 (3rd or 4th year) Nutrition courses (HNSC for UM students) taken within an accredited undergraduate program.

A grade of B or higher is required in all courses taken to meet the academic upgrading, if required by CDM.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.A.H.N. Applied Human Nutrition program of study (https://umanitoba.ca/explore/programs-of-study/master-of-applied-human-nutrition-mahn/) page.

Degree Requirements

The Master of Applied Human Nutrition program is comprised of 30 credit hours of graduate level coursework, including 18 credit hours of practicum training. Students must meet the minimum 1250 contact hours of practical placements, as per PDEP accreditation standards.

Expected Time to Graduate: 1 year

Progression Chart

Course	Title	Hours
Year 1		
Fall		
HNSC 7700	Applied Human Nutrition Practicum 1	6
HNSC 7730	Advanced Applied Human Nutrition 1	3
	Hours	**9**
Winter		
HNSC 7710	Applied Human Nutrition Practicum 2	6
HNSC 7740	Advanced Applied Human Nutrition 2	3
	Hours	**9**
Spring		
HNSC 7720	Applied Human Nutrition Practicum 3	6
HNSC 7750	Advanced Applied Human Nutrition 3	3

HNSC 7760	Practice-Based Dietetics Research	3
	Hours	**12**
	Total Hours	**30**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students who have previously attended another accredited practicum program may request transfer credit for courses. A decision on advance credit cannot be determined until official transcripts and complete course descriptions have been reviewed.

Assessment of credit and time lapse will involve consolation with the College of Dietitians of Manitoba to ensure currency is met.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Biosystems Engineering, M.Eng.

Biosystems Engineering
Head: D. (Danny) Mann
Campus Address/General Office: E2-376 EITC (Engineering Building)
Telephone: 204-474-6033
Fax: 204-474-7512
Email Address: headbio@umanitoba.ca
Website: umanitoba.ca/engineering/biosystems (https://umanitoba.ca/engineering/biosystems/)
Academic Staff: Please refer to the Biosystems Engineering website (https://umanitoba.ca/engineering/faculty-staff/biosystems-engineering/) for Faculty information.

Biosystems Engineering Program Information

The Department of Biosystems Engineering offers graduate programs leading to Master of Science, Master of Engineering, and Doctor of Philosophy degrees. The graduate programs in the department focus on applications of engineering in biological systems. Strong emphasis is placed on assisting graduate students to gain a broad range of skills and experience in conducting interdisciplinary research, in understanding the interrelationships among physical and biological factors, and in written and oral communication.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Biosystems Engineering M.Eng. Admission Requirements

For admission into the M.Eng. program applicants must have a minimum of a Bachelor's degree in engineering. In exceptional cases, based on the candidate's professional experience, this requirement may be waived on the recommendation of the Department Head.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biosystems Engineering M.Eng. program of study (https://umanitoba.ca/explore/programs-of-study/biosystems-engineering-meng/) page.

Degree Requirements

The M.Eng is a course-based degree. A minimum of 30 credit hours of coursework is required. The following conditions must be met:

- A minimum of 18 credit hours must be taken at the 7000 level. GRAD 7050 may be used as a substitute for 6 credit hours of 7000 level coursework. The remaining credit hours must be taken at the 3000 level or above.
- A minimum of 18 credit hours must be taken from any of the Engineering departments including a minimum of 15 credit hours from the Department of Biosystems Engineering.

All courses must be approved by the department's appointed M.Eng. advisor.

Expected time to graduate: 12-18 months

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select a minimum of 18 credit hours must be taken at the 7000 level		18
Select 12 credit hours at the 3000 level or above		12
	Hours	**30**
	Total Hours	**30**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Biosystems Engineering, M.Sc.

Biosystems Engineering
Head: D. (Danny) Mann
Campus Address/General Office: E2-376 EITC (Engineering Building)
Telephone: 204-474-6033
Fax: 204-474-7512
Email Address: headbio@umanitoba.ca
Website: umanitoba.ca/engineering/biosystems (https://umanitoba.ca/engineering/biosystems/)
Academic Staff: Please refer to the Biosystems Engineering website (https://umanitoba.ca/engineering/faculty-staff/biosystems-engineering/) for Faculty information.

Biosystems Engineering Program Information

The Department of Biosystems Engineering offers graduate programs leading to Master of Science, Master of Engineering, and Doctor of Philosophy degrees. The graduate programs in the department focus on applications of engineering in biological systems. Strong emphasis is placed on assisting graduate students to gain a broad range of skills and experience in conducting interdisciplinary research, in understanding the interrelationships among physical and biological factors, and in written and oral communication.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Biosystems Engineering M.Sc. Admission Requirements

For admission into the M.Sc. program, applicants are normally required to hold a Bachelor's degree in Biosystems Engineering or equivalent from a recognized university. Applicants with degrees in related areas may be recommended for admission by the Department Head.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biosystems Engineering M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/biosystems-engineering-msc/) page.

Degree Requirements

The M.Sc. is a research degree consisting of coursework and a thesis based on original research conducted by the student. In addition to the

minimum course requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 79) of this Calendar, a minimum of 12 credit hours of coursework is required, including at least 6 credit hours of courses at the 7000 level (which must include BIOE 7290) from the Department of Biosystems Engineering. The remaining 6 credit hours must be at the 3000 level or above from any department.

Master of Science students are required to spend at least one academic session in full-time resident graduate study. On recommendation of the department head, the residence requirement may be waived in special cases.

Expected time to graduate: 18-24 months

Progression Chart

All students must complete a minimum of 12 credit hours of coursework approved by the faculty advisor.

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOE 7290	Biosystems Engineering Seminar 1	3
BIOE 7XXX	Course designated BIOE 7000 or above	3
Select courses designated 3000 or above from any department		6
Thesis Proposal		0
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**12**

Students are expected to demonstrate independence and professionalism during their graduate studies. Students are expected to be present on campus for scheduled classes, regular meetings with the advisor, and research work (unless the research work is being done at a site off-campus). It is understood that progress on research may be limited when the student is taking classes, however, substantial progress is expected during periods when classes are not being taken. Research progress includes tasks such as reviewing scientific literature, collecting experimental data, analyzing experimental data, and paper/thesis writing. The advisory committee will judge whether the academic performance has been satisfactory based on the plans outlined in previous "Progress Reports."

Thesis Proposal

A thesis proposal (approximately 20 pages) is to be prepared by the M.Sc. student in consultation with the advisor/co-advisor, usually within 12 months of registration. The thesis proposal should include a statement of the thesis topic, a review of the relevant literature, the hypotheses to be tested, the proposed research methodology, and anticipated significance of the research. The thesis proposal should be circulated to the advisory committee prior to being presented orally to the student's advisory committee in a closed session. Unanimous approval by the advisory committee is required. If unanimous approval is not received, the thesis proposal can be revised and resubmitted.

Master's Thesis

A thesis must be submitted based on original research conducted by the student. The oral examination for the MSc degree, including distribution of the written thesis, will be organized by the student's advisor/co-advisor. Students are expected to present an overview of the work in 20-30 minutes and subsequently answer questions posed by the members of the examining committee.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Biosystems Engineering, Ph.D.

Biosystems Engineering

Head: D. (Danny) Mann
Campus Address/General Office: E2-376 EITC (Engineering Building)
Telephone: 204-474-6033
Fax: 204-474-7512
Email Address: headbio@umanitoba.ca
Website: umanitoba.ca/engineering/biosystems (https://umanitoba.ca/engineering/biosystems/)
Academic Staff: Please refer to the Biosystems Engineering website (https://umanitoba.ca/engineering/faculty-staff/biosystems-engineering/) for Faculty information.

Biosystems Engineering Program Information

The Department of Biosystems Engineering offers graduate programs leading to Master of Science, Master of Engineering, and Doctor of Philosophy degrees. The graduate programs in the department focus on applications of engineering in biological systems. Strong emphasis is placed on assisting graduate students to gain a broad range of skills and experience in conducting interdisciplinary research, in understanding the interrelationships among physical and biological factors, and in written and oral communication.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Biosystems Engineering Ph.D. Admission Requirements

For admission into the Ph.D. program, applicants are normally required to hold a M.Sc. degree in Biosystems Engineering or equivalent from a recognized university. Applicants with degrees in related areas may be recommended for admission by the Department Head.

Students making exceptional progress while enrolled in the M.Sc. program may request to transfer to the Ph.D. program upon the consent of the department head and based on a recommendation from the student's advisory committee and the Biosystems Engineering Graduate Studies Committee which investigates the student's qualifications and suitability for Ph.D. study. In such cases, the program credit hour requirements shall be recommended at the time of transfer by the student's advisory committee.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biosystems Engineering Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/biosystems-engineering-phd/) page.

Degree Requirements

Students are normally required to complete 12 credit hours of coursework, including a seminar course (BIOE 7270), and a thesis. The remaining 9 credit hours at the 7000 level can be taken from any Department.

Graduate Specialization in Engineering Education (GSEE)

The Department of Biosystems Engineering offers a Graduate Specialization in Engineering Education (GSEE) at the Doctoral level. The GSEE will require 12 credit hours of coursework at the 7000 level and a thesis on an Engineering Education topic. The coursework requirements include:

1. BIOE 7270 Advanced Seminar in Biosystems Engineering;
2. One research methodologies course (3 credit hours) at the 7000 level as approved by the student's supervisor; and
3. Two courses at the 7000 level (6 credit hours) approved by the student's supervisor, at least one of which must be an ENG 7000-level course (e.g., ENG 7010 The Engineering Design Process; ENG 7020 Topics in Engineering Education Practice; ENG 7030 The Discipline of Engineering Education; ENG 7040 Foundations of Engineering Education Research.)

Expected time to graduate: 3 - 4 years

Progression Chart

All students must complete a minimum of 12 credit hours of coursework approved by the faculty advisor.

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOE 7270	Advanced Seminar in Biosystems Engineering	3
COURSE 7XXX	Courses designated 7000 or above from any department	9
Thesis Proposal		
	Hours	**12**
Years 2-3		
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

Students are expected to demonstrate independence and professionalism during their graduate studies. Students are expected to be present on campus for scheduled classes, regular meetings with the advisor, and research work (unless the research work is being done at a site off-campus). It is understood that progress on research may be limited when the student is taking classes, however, substantial progress is expected during periods when classes are not being taken. Research progress includes tasks such as reviewing scientific literature, collecting experimental data, analyzing experimental data, and paper/thesis writing. Ph.D. students are expected to display increasing independence as they proceed through the doctoral program. The advisory committee will judge whether the academic performance has been satisfactory based on the plans outlined in the previous "Progress Report" form.

Thesis Proposal

The thesis proposal will normally be reviewed and approved by the advisory committee within the first 12 months of the PhD program.

It will consist of a maximum 20-page (double spaced) proposal including sections on objectives & sub-objectives, brief review of relevant literature, proposed methodology, and impact/significance of the proposed research. The PhD student will give a 20-25 minute presentation on the thesis proposal. The advisory committee may ask questions of clarification or offer suggestions for modification of the research objectives and/or proposed methodology. The thesis proposal presentation should not be viewed as an oral examination that must be passed. The purpose is to set the direction of the students' research with input from the advisory committee.

Doctoral Candidacy Examination

The candidacy examination consists of two parts (i.e., a written portion and an oral portion) that together comprise the candidacy examination.

Doctoral Thesis

The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication. The final examination for the PhD degree, which is organized by the Faculty of Graduate Studies, includes two distinct stages: i) examination of the candidate's written thesis by members of the examining committee followed by ii) an oral examination in which the student presents an overview of the work in 20-30 minutes and is expected to answer questions on the subject of the thesis.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Entomology, M.Sc.

Entomology
Head (Acting): Kateryn Rochon
Campus Address/General Office: 214 Animal Science Building
Telephone: 204-474-8077
Fax: 204-474-7628
Email Address: grad.ent@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/entomology (https://umanitoba.ca/agricultural-food-sciences/entomology/)
Academic Staff: Please refer to the Entomology website (https://umanitoba.ca/agricultural-food-sciences/entomology/faculty-and-staff/) for Faculty information.

Entomology Program Information

The Department of Entomology is the only such in Canada, offering programs of study leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Entomology M.Sc. Admission Requirements

Applicants normally require a four-year Bachelor's degree in Agriculture or Science with a suitable selection of courses in insect biology. Academically strong students without this preparation may be admitted to the M.Sc. program but may be expected to take additional courses to ensure that they have a strong foundation of entomological knowledge.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Entomology M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/entomology-msc/) page.

Degree Requirements

Thesis Route

Students must complete a minimum of 6 credit hours of coursework at the 7000 level or above. As part of their academic program, students are required to take ENTM 7150 which is held in the Winter term in each academic year. Students must submit an acceptable thesis and pass a thesis oral examination.

The Department of Entomology offers the M.Sc. degree only through the thesis route.

Expected Time to Graduate: 2 - 3 years

Progression Chart

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENTM 7150	Advanced Entomology 1	3
Select courses at the 7000 level in the area of specialization		3
GRAD 7000	Master's Thesis	0
Total Hours		**6**

Registration Requirements

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Entomology, Ph.D.

Entomology
Head (Acting): Kateryn Rochon
Campus Address/General Office: 214 Animal Science Building
Telephone: 204-474-8077
Fax: 204-474-7628
Email Address: grad.ent@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/entomology (https://umanitoba.ca/agricultural-food-sciences/entomology/)
Academic Staff: Please refer to the Entomology website (https://umanitoba.ca/agricultural-food-sciences/entomology/faculty-and-staff/) for Faculty information.

Entomology Program Information

The Department of Entomology is the only such in Canada, offering programs of study leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Entomology Ph.D. Admission Requirements

A candidate must normally complete a M.Sc. degree before entering the Ph.D. program, however, students enrolled in a M.Sc. program who demonstrate exceptional ability may, in the early stages of their program, request transfer to a Ph.D. program. Applicants to the Ph.D. program are required to submit a short proposal of a research project they consider suitable as a Ph.D. research thesis project. The Department Head and potential Advisor may recommend that an applicant take a Qualifying Examination.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Entomology Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/entomology-phd/) page.

Degree Requirements

Directly from M.Sc.

Students must complete a minimum of 6 credit hours of coursework at the 7000 level or above. As part of their academic program, students are required to take ENTM 7220 which is held in the Winter term in each academic year. Students must pass a Candidacy Exam, submit an acceptable thesis and pass a thesis oral examination.

Transfer from M.Sc.

Students transferring from a M.Sc. to a Ph.D. program are required to take 12 credit hours of coursework at the 7000 level or above. As part of their academic program, students are required to take ENTM 7220 or hold credit in ENTM 7150. Students must pass a Candidacy Exam, submit an acceptable thesis and pass a thesis oral examination.

Expected Time to Graduate: 3 - 5 years

Progression Chart

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENTM 7220	Advanced Entomology	3
Select courses at the 7000 level in the area of specialization		3
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis	0
Total Hours		**6**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Food Science, M.Sc.

Food and Human Nutritional Sciences
Head: Dr. Cristina Rosell
Grad Chair: Dr. Harold Aukema
Campus Address/General Office: 209 Human Ecology Building
Telephone: 204-474-6874
Fax: 204-474-7593
Email Address: FHNS.Grad@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/food-and-human-nutritional-sciences (https://umanitoba.ca/agricultural-food-sciences/food-and-human-nutritional-sciences/)
Academic Staff: Please visit our Academic Staff webpage (https://umanitoba.ca/agricultural-food-sciences/food-human-nutritional-sciences-faculty-and-staff/)

Food Science Program Information

The Department offers programs in both food science and human nutritional sciences leading to the Master of Science and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Food Science M.Sc. Admission Requirements

Entrance into the program requires a four-year undergraduate degree in Human Nutritional Sciences, Food Science, or equivalent. Decisions on equivalent degrees or courses needed to bring the student's background to the equivalent of a Human Nutritional Sciences or Food Science degree will be made by the Food and Human Nutritional Sciences

Graduate Studies Committee (FHNSGSC). Each student must have an advisor identified before acceptance into the program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Food Science M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/food-science-msc/) page.

Degree Requirements

There are two types of Food Science Master's programs in the Department of Food and Human Nutritional Sciences:

Thesis

Thesis projects may be of a basic research type or of an applied or practical nature relating to the chemistry, physics and/or microbiology of food raw materials, processes and/or products.

As part of the 12 credit hours required in the program, all students are required to take HNSC 7200 (3 CH) or FOOD 7130 (3 CH), plus 3 credit hours in HNSC or FOOD courses at the 7000 level. The remaining 6 credit hours can be from within or outside the department and must include at least 3 credit hours at the 7000 level or above. Reading/Special Topics courses at the Master's level must not exceed 3 credit hours.

Non-thesis

Not currently accepting students into this option

Additional coursework plus practical work terms and a comprehensive examination are substituted for a research project and written thesis.

The non-thesis program requires a minimum of 30 credit hours of coursework. Of this total, a minimum of 15 credit hours must be at the 7000 level in Food Science with the remaining courses to be approved by the student's advisory committee.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
FOOD 7130	Food Science Seminar	3
Select 3 credit hours in HNSC or FOOD courses at the 7000 level.		3
Select 6 credit hours from within or outside the department, which must include at least 3 credit hours at the 7000 level or above		6
Thesis Proposal [1]		
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**12**

1. A written thesis proposal followed by an oral presentation by the student must be assessed and approved by the Advisory Committee within 9 months of commencing the program. Students will be apprised of guidelines and evaluation procedures by the Advisor. The thesis proposal shall include the title, an introduction, literature review, hypothesis, objectives, methodology, references and Gantt chart. Students shall submit their draft thesis proposal to the advisor for feedback prior to circulation to the Advisory Committee. The student then presents orally for 20 minutes and defends the thesis proposal to the members constituting the Advisory Committee.
2. Students in the thesis route must pass an Oral Examination. The examining committee will grant approval based on the written document and the ability of the student to defend the work completed. Agreement with no more than one dissenting vote on the written thesis and oral defense is required for final approval.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment will be cancelled the first week of classes.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Food Science, Ph.D.

Food and Human Nutritional Sciences
Head: Dr. Cristina Rosell
Grad Chair: Dr. Harold Aukema
Campus Address/General Office: 209 Human Ecology Building
Telephone: 204-474-6874
Fax: 204-474-7593
Email Address: FHNS.Grad@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/food-and-human-nutritional-sciences (https://umanitoba.ca/agricultural-food-sciences/food-and-human-nutritional-sciences/)
Academic Staff: Please visit our Academic Staff webpage (https://umanitoba.ca/agricultural-food-sciences/food-human-nutritional-sciences-faculty-and-staff/)

Food Science Program Information

The Department offers programs in both food science and human nutritional sciences leading to the Master of Science and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Food Science Ph.D. Admission Requirements

In addition to the admission requirements of the Faculty of Graduate Studies, the student must hold a research-thesis-based Master of Science degree or equivalent in the general areas of food or human nutritional sciences from a recognized university. The student must have attained a minimum University of Manitoba equivalent GPA of 3.5 in Master's coursework. Students with a Master of Science in a different scientific discipline will be considered for admission by the Food and Human Nutritional Sciences Graduate Committee (FHNSGSC) on a case-by-case basis.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Food Science Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/food-science-phd/) page.

Degree Requirements

The coursework requirement will consist of a minimum of 6 credit hours at the 7000 level. Of these 6 credit hours, 3 will consist of the seminar course (FOOD 7130, 3 CH or HNSC 7200, 3 CH). Further coursework may be required at the advisory committee's discretion.

Expected Time to Graduate: 3.5 years

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
FOOD 7130	Food Science Seminar	3
Course at the 7000 level		3
Thesis Proposal [1]		
	Hours	**6**
Years 2-4		
GRAD 8010	Doctoral Candidacy Examination [2]	0
GRAD 8000	Doctoral Thesis [3]	0
	Hours	**0**
	Total Hours	**6**

1. A written thesis proposal followed by an oral presentation by the student must be assessed and approved by the Advisory Committee within 12 months of commencing the program.
2. The candidacy exam will consist of 2 parts:
   1. A written work consisting of a complete research grant proposal.
   2. An oral defense of the written work.
3. The final examination for the Ph.D. degree proceeds in two (2) stages:
   1. Examination of the candidate's thesis by the examining committee;
   2. Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment will be cancelled the first week of classes.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Human Nutritional Sciences, M.Sc.

Food and Human Nutritional Sciences
Head: Dr. Cristina Rosell
Grad Chair: Dr. Harold Aukema
Campus Address/General Office: 209 Human Ecology Building
Telephone: 204-474-6874
Fax: 204-474-7593
Email Address: FHNS.Grad@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/department-food-and-human-nutritional-sciences (https://umanitoba.ca/agricultural-food-sciences/department-food-and-human-nutritional-sciences/)
Academic Staff: Please refer to the Academic Staff (https://umanitoba.ca/agricultural-food-sciences/food-human-nutritional-sciences-faculty-and-staff/#academic-staff) webpage.

Human Nutritional Sciences Program Information

The Department offers programs in both food science and human nutritional sciences leading to the Master of Science and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Human Nutritional Sciences M.Sc. Admission Requirements

Entrance into the program requires a four-year undergraduate degree in Human Nutritional Sciences, Food Science, or equivalent. Decisions on equivalent degrees or courses needed to bring the student's background to the equivalent of a Human Nutritional Sciences or Food Science degree will be made by the Food and Human Nutritional Sciences Graduate Studies Committee (FHNSGSC). Each student must have an advisor identified before acceptance into the program.

Students with a three-year undergraduate degree enter at the Pre-Master's level, in which at least 18 credit hours of coursework are required. Pre-Master's students are not eligible for graduate student stipends and do not carry out a research project.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Human Nutritional Sciences M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/human-nutritional-sciences-msc/) page.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Degree Requirements

As part of the 12 credit hours required in the program, all students are required to take HNSC 7200 (3 CH) or FOOD 7130 (3 CH), plus 3 credit hours in HNSC or FOOD courses at the 7000 level. The remaining 6 credit hours can be from within or outside the department and must include at least 3 credit hours at the 7000 level or above. Reading/Special Topics courses at the Master's level must not exceed 3 credit hours.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HNSC 7200	Seminar in Food and Nutrition Research [1]	3
Select 3 credit hours in HNSC or FOOD courses at the 7000 level		3
Select 6 credit hours from within or outside the department, which must include at least 3 credit hours at the 7000 level or above		6
Thesis Proposal [2]		
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis [3]	0
	Hours	**0**
	Total Hours	**12**

[1] Students are required to attend and participate in all regular seminar classes (HNSC 7200) for the duration of their program. In these seminars students also will have duties as chair, discussant and evaluator, as assigned by the seminar coordinator.

[2] A written thesis proposal followed by an oral presentation by the student must be assessed and approved by the Advisory Committee within 9 months of commencing the program. Students will be apprised of guidelines and evaluation procedures by the Advisor. The thesis proposal shall include the title, an introduction, literature review, hypothesis, objectives, methodology, references and Gantt chart. Students shall submit their draft thesis proposal to the advisor for feedback prior to circulation to the Advisory Committee. The student then presents orally for 20 minutes and defends the thesis proposal to the members constituting the Advisory Committee.

[3] Students must pass an Oral Examination. The examining committee will grant approval based on the written document and the ability of the student to defend the work completed. Agreement with no more than one dissenting vote on the written thesis and oral defense is required for final approval.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning or newly admitted graduate and occasional students must see a faculty advisor or the department head, and submit their course plan, prior to registering.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Human Nutritional Sciences, Ph.D.

Food and Human Nutritional Sciences
Head: Dr. Cristina Rosell
Grad Chair: Dr. Harold Aukema
Campus Address/General Office: 209 Human Ecology Building
Telephone: 204-474-6874
Fax: 204-474-7593
Email Address: FHNS.Grad@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/department-food-and-human-nutritional-sciences (https://umanitoba.ca/agricultural-food-sciences/department-food-and-human-nutritional-sciences/)
Academic Staff: Please refer to the Academic Staff (https://umanitoba.ca/agricultural-food-sciences/food-human-nutritional-sciences-faculty-and-staff/#academic-staff) webpage.

Human Nutritional Sciences Program Information

The Department offers programs in both food science and human nutritional sciences leading to the Master of Science and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Human Nutritional Sciences Ph.D. Admission Requirements

In addition to the admission requirements of the Faculty of Graduate Studies, the student must hold a research-thesis-based Master of Science degree or equivalent in the general areas of food or human nutritional sciences from a recognized university. The student must have attained a minimum University of Manitoba equivalent GPA of 3.5 in Master's coursework. Students with a Master of Science in a different scientific discipline will be considered for admission by the Food and Human Nutritional Sciences Graduate Committee (FHNSGSC) on a case-by-case basis.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Human Nutritional Sciences Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/human-nutritional-sciences-phd/) page.

Degree Requirements

The coursework requirement will consist of a minimum of 6 credit hours at the 7000 level. Of these 6 credit hours, 3 will consist of the seminar course (FOOD 7130, 3 CH or HNSC 7200, 3 CH). Further coursework may be required at the advisory committee's discretion.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HNSC 7200	Seminar in Food and Nutrition Research [1]	3
Course at the 7000 level		3
Thesis Proposal [2]		
	Hours	**6**
Years 2-4		
GRAD 8010	Doctoral Candidacy Examination [3]	0
GRAD 8000	Doctoral Thesis [4]	0
	Hours	**0**
	Total Hours	**6**

1. Students are required to attend and participate in all regular seminar classes (HNSC 7200) for the duration of their program. In these seminars students will also have duties as chair, discussant and evaluator, as assigned by the seminar coordinator.
2. A written thesis proposal followed by an oral presentation by the student must be assessed and approved by the Advisory Committee within 12 months of commencing the program.
3. The candidacy exam will consist of 2 parts:
   1. A written work consisting of a complete research grant proposal.
   2. An oral defense of the written work.
4. The final examination of the Ph.D. degree proceeds in two (2) stages:
   1. Examination of the candidate's thesis by the examining committee;
   2. Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, students must consult with their advisor and then present a completed registration approval form to the department head. Any changes after the initial registration must also be approved by both advisor and department head.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment will be cancelled the first week of classes.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Plant Science, M.Sc.

Plant Science
Head: Dr. Douglas Cattani (Acting)
Campus Address/General Office: 222 Agriculture Building
Telephone: 204-474-8221
Fax: 204-474-7528
Email Address: plantscience_gradstudies@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/plant-science (https://umanitoba.ca/agricultural-food-sciences/plant-science/)
Academic Staff: Please refer to the Plant Science staff listing (https://umanitoba.ca/agricultural-food-sciences/plant-science/plant-science-faculty-and-staff/).

Plant Science Program Information

The Department of Plant Science offers programs leading to the Master of Science and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Plant Science M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Plant Science M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/plant-science-msc/) page.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Degree Requirements

Research and Thesis

The thesis route will include a thesis and a minimum of 12 credit hours of coursework of which 9 credit hours must be at the 7000 level and include PLNT 7250, a mandatory course.

Expected Time to Graduate: 2-2.5 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select courses (0-9 credit hours) as determined by advisory committee and student [1]		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
Year 2		
PLNT 7250	Plant Science Seminar	3
Select courses (0-9 credit hours) as determined by advisory committee and student [1]		
GRAD 7000	Master's Thesis [2]	0
	Hours	**3**
	Total Hours	**3**

1. Credit hours as determined by advisory committee and student. **Minimum credit hours required: 12.**
2. Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/advisory committee to determine courses. Courses must be listed on the departmental approval form (available from the Plant Science General Office) and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner. Not all courses are offered each year.

Regulations

Supplemental Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Plant Science, Ph.D.

Plant Science
Head: Dr. Douglas Cattani (Acting)
Campus Address/General Office: 222 Agriculture Building
Telephone: 204-474-8221
Fax: 204-474-7528
Email Address: plantscience_gradstudies@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/plant-science (https://umanitoba.ca/agricultural-food-sciences/plant-science/)
Academic Staff: Please refer to the Plant Science staff listing (https://umanitoba.ca/agricultural-food-sciences/plant-science/plant-science-faculty-and-staff/).

Plant Science Program Information

The Department of Plant Science offers programs leading to the Master of Science and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Plant Science Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Plant Science Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/plant-science-phd/) page.

Degree Requirements

A minimum of 12 credit hours at the 7000 level (including PLNT 7420 for which students must register each year of their Ph.D. program) plus a thesis.

Expected Time to Graduate: 3.5 -4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PLNT 7420	Advanced Plant Science Seminar (register for each year)	
Select courses (0-9 credit hours) as determined by advisory committee and student [1]		
GRAD 8000	Doctoral Thesis [2]	0
	Hours	**0**
Year 2		
PLNT 7420	Advanced Plant Science Seminar (register for each year)	
Select courses (0-9 credit hours) as determined by advisory committee and student [1]		
GRAD 8010	Doctoral Candidacy Examination (to be completed in Year 2 or Year 3)	0
GRAD 8000	Doctoral Thesis [2]	0
	Hours	**0**
Year 3		
PLNT 7420	Advanced Plant Science Seminar (register for each year, credit granted in final year)	3
Select courses (0-9 credit hours) as determined by advisory committee and student [1]		
GRAD 8010	Doctoral Candidacy Examination (to be completed in Year 2 or Year 3)	0
GRAD 8000	Doctoral Thesis [2]	0
	Hours	**3**
	Total Hours	**3**

1. Credit hours as determined by advisory committee and student. **Minimum credit hours required: 12.**
2. An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/advisory committee to determine courses. Courses must be listed on the departmental approval form (available from the Plant Science General Office) and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner. Not all courses are offered each year.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Soil Science, M.Sc.

Soil Science
Head (Acting): Dr. Mario Tenuta
Grad Chair: Dr. Mario Tenuta
Campus Address/General Office: 362 Ellis Building
Telephone: 204-474-8666
Fax: 204-474-7642
Email Address: soilsci.gradstudies@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/soil-science (https://umanitoba.ca/agricultural-food-sciences/soil-science/)
Academic Staff: Please refer to the Soil Science staff listing (https://umanitoba.ca/agricultural-food-sciences/soil-science/soil-science-faculty-and-staff/).

Soil Science Program Information

The Department of Soil Science offers graduate programs leading to the Master of Science and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Soil Science M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. The adequacy of the background of an applicant will be evaluated by the Soil Science Graduate Studies Committee and the Department Head. Normally, a student should have a strong background in soil science and/or a strong background in the basic sciences related to the student's proposed area of study.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Soil Science M.Sc. (https://umanitoba.ca/explore/programs-of-study/soil-science-msc/) program of study page.

Degree Requirements

Research and Thesis

The thesis route will include a thesis and a minimum of 12 credit hours of coursework. The minimum of 12 credit hours will consist of:

SOIL 7220, plus 9 additional credit hours, of which 3 credit hours must be from the Department of Soil Science at the 7000 level.

To meet graduation requirements, all students must have demonstrated, either in their current program or in previous studies:

1. Nine credit hours in fundamental and applied soil sciences at the senior undergraduate level or graduate level;
   and
2. Experimental design and statistical analysis - 3 credit hours at the senior undergraduate or graduate level;
   and
3. Communication skills – in addition to completing SOIL 7220, students normally will present papers at a scientific meeting.

Expected Time to Graduate: 2 to 2.5 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SOIL 7220	Principles of Scientific Research and Communication	3
Select courses (0-9 credit hours) as determined by advisory committee and student [1]		
GRAD 7000	Master's Thesis	0
	Hours	**3**
Year 2		
Select courses (0-9 credit hours) as determined by advisory committee and student [1]		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**3**

[1] Credit hours as determined by advisory committee and student. **Minimum total credit hours required: 12.**

Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/advisory committee to determine courses. Courses must be listed on the departmental approval form and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Soil Science, Ph.D.

Soil Science
Head (Acting): Dr. Mario Tenuta
Grad Chair: Dr. Mario Tenuta
Campus Address/General Office: 362 Ellis Building
Telephone: 204-474-8666
Fax: 204-474-7642
Email Address: soilsci.gradstudies@umanitoba.ca
Website: umanitoba.ca/agricultural-food-sciences/soil-science (https://umanitoba.ca/agricultural-food-sciences/soil-science/)
Academic Staff: Please refer to the Soil Science staff listing (https://umanitoba.ca/agricultural-food-sciences/soil-science/soil-science-faculty-and-staff/).

Soil Science Program Information

The Department of Soil Science offers graduate programs leading to the Master of Science and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Soil Science Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Soil Science Ph.D. (https://umanitoba.ca/explore/programs-of-study/soil-science-phd/) program of study page.

Degree Requirements

Each student's program is individually tailored, but still must satisfy those requirements prescribed by the Department. Where admission to the Ph.D. is from a M.Sc. degree, the course work will be a minimum of 6 credit hours at the 7000 level or higher of which at least 3 credit hours must be from the Department of Soil Science.

Where admission to the Ph.D. is directly from an Honours Bachelor Degree or equivalent, the coursework will be a minimum of 18 credit hours consisting of a minimum of 12 credit hours at the 7000 level (of which at least 6 credit hours must be from the Department of Soil Science) with the balance of the coursework at the 3000 level or above.

To meet graduation requirements, all students must have demonstrated either in their current program or in previous studies:

1. Twelve credit hours in fundamental and applied soil sciences at the senior undergraduate or graduate level;
   and
2. Experimental design and statistical analysis - 3 credit hours at the senior undergraduate or graduate level;
   and
3. Communication skills – students will have completed SOIL 7220 or a similar course approved by the Department Head. In addition, students will normally present papers at scientific meetings.

Expected Time to Graduate: 3.5 - 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SOIL 7220	Principles of Scientific Research and Communication	3
Select courses as determined by advisory committee and student [1]		
GRAD 8000	Doctoral Thesis [2]	0
	Hours	**3**
Year 2		
Select courses as determined by advisory committee and student [1]		
GRAD 8010	Doctoral Candidacy Examination (to be completed in Year 2 or Year 3)	0
GRAD 8000	Doctoral Thesis [2]	0
	Hours	**0**
Year 3		
Select courses as determined by advisory committee and student [1]		

GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis (to be completed in Year 2 or Year 3) [2]	0
	Hours	**0**
	Total Hours	**3**

1 Credit hours as determined by advisory committee and student. **Minimum credit hours required: 6.**

2 An essential feature of Ph.D. study is the candidate's demonstration of competence to complete a research project and present the findings. The thesis must constitute a distinct contribution to knowledge in the major field of study, and the research must be of sufficient merit to be, in the judgement of the examiners, acceptable for publication.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor/advisory committee to determine courses. Courses must be listed on the departmental approval form and written approval granted from both the advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Faculty of Architecture

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Architecture, M.Arch. (p. 169)	2	48	Yes
City Planning, M.C.P. (p. 171)	2	39-51	Yes
Design and Planning, Ph.D. (p. 173)	4	12	
Interior Design, M.I.D. (p. 174)	1.5-2	21-48	Yes
Landscape Architecture, M.L.Arch. (p. 176)	4	42-111	Yes

Architecture, M.Arch.

Architecture
Head: Brian T. Rex
Grad Chair: Brian T. Rex
Campus Address/General Office: 201 Russell Building
Telephone: 204-474-8769
Fax: 204-474-7532
Email Address: gradarch@umanitoba.ca (GradArch@umanitoba.ca)
Website: umanitoba.ca/architecture/ (https://umanitoba.ca/architecture/)

Academic Staff: Please see Architecture website (https://umanitoba.ca/architecture/) for Faculty information.

Architecture Program Information

The Master of Architecture thesis-based program consists of a combination of coursework and a design component.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.Arch. Admission Requirements

There are different ways to become eligible to apply for the Master of Architecture Program:

DIRECT ENTRY

All applicants must meet the general admission and entrance requirements of the Faculty of Graduate Studies. The entry level into the program will be determined by the Department of Architecture Admission Committee's evaluation of the individual's application and supporting documents. Direct admissions to the M.Arch Program requires that applicants have a minimum of a four-year undergraduate degree in one of the following: Architecture, Architectural Design, Architectural Science, Environmental Design/Architecture option, or the equivalent, from a recognized college or university, with minimum GPA of 3.0 or equivalent B in the last two full years (60 credit hours) of study.

For those applying with a University of Manitoba Bachelor of Environmental Design degree a minimum of "C+" in courses EVAR 4002, EVAR 4004, EVAR 4008, EVAR 4010 with a minimum GPA of 3.0 in the last two full years (60 credit hours) of study is required.

Please refer to the following web page for more information: http://umanitoba.ca/faculties/graduate studies/admissions/programs/architecture.html (http://umanitoba.ca/faculties/architecture/programs/architecture/admissions_package.html)

ARCHITECTURE MASTER'S PREPARATION (AMP 1 & AMP 2) UNDERGRADUATE PROGRAM

For applicants who have a recognized three or four year undergraduate degree in either a non-design discipline (such as Fine Art, Engineering, Science, Philosophy, Theatre, Psychology, Music, Film, English, History, Art History, Urban Studies, Geography, Commerce, etc.)

or

a design-related discipline (such as Interior Design, Landscape Architecture, Industrial Design, etc.) and wish to eventually apply to the Master of Architecture Program.

General Eligibility: All applicants must meet the general admission and entrance requirements set by Environmental Design: Architecture. The entry level into the program will be determined by the Department of Architecture Admissions Committee's evaluation of the individual's application and supporting documents.

Note: Upon successful completion of the AMP Program students wishing to continue into the M.Arch Program must officially apply for graduate admission. Evaluation is based on the student's progress in the AMP Program, as evidenced in a portfolio submission, GPA and a Faculty of Graduate Studies application.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Arch. program of study (https://umanitoba.ca/explore/programs-of-study/architecture-march/) page.

Degree Requirements

Degree Requirements: 48 credit hours

Faculty of Architecture's Cooperative Education/ Integrated Work program (Co-op/I) Graduate Option

Students may apply to the Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) graduate option. Students must complete a minimum of two and maximum of three 4-month work terms to have the Co-op/I option acknowledged on their graduation parchment. For each work term, students must enroll in the appropriate course: ARCG 7150 and, subsequently, ARCG 7250 and/or ARCG 7350. Each course requires submission of a written report and portfolio covering the work completed for the professional assignment. Work term courses are valued at zero credit hours and evaluated as pass/fail. These are above and beyond graduate course requirements. Additional fees will apply.

Accreditation

In Canada, all provincial/territorial associations/institutes/orders recommend a degree from an accredited professional degree program as a prerequisite for licensure. The Canadian Architectural Certification Board (CACB), which is the sole agency authorized to accredit Canadian professional degree programs in architecture, recognizes two types of accredited degrees: the Master of Architecture (M.Arch) and the Bachelor of Architecture (B. Arch). A program may be granted a six-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree, which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

In 2018 the Master of Architecture program was formally granted a full accreditation term of six years effective July 1, 2018. The term will end on June 30, 2024. The next CACB Maintenance Accreditation Visit is scheduled to take place in spring 2024.

Expected Time to Graduate: 2 years.

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ARCH 7000 & ARCH 7010	Advanced Technology Topics I and Advanced Technology Topics 2	3
ARCH 7020 & ARCH 7030	Research Topics: History and Theory 1 and Research Topics: History and Theory 2	3
ARCH 7040	Professional Practice	3
ARCH 7050	Arch Studio 5 and Comprehensive Program Report	9
ARCH 7060	Arch Studio 6	9
ARCH 7350	Legal Aspects of Architectural Practice	3
	Hours	**30**

Year 2		
ARCH 7070	Design Research Studio	9
ARCH 7080	Technology Thesis Report	3
Select one of the following:		3
ARCH 7000 & ARCH 7010	Advanced Technology Topics I and Advanced Technology Topics 2	
COURSE XXXX	Elective Course at 3000 level or higher as approved by the department	
Select one of the following:		3
ARCH 7020 & ARCH 7030	Research Topics: History and Theory 1 and Research Topics: History and Theory 2	
Elective Course at 3000 level or higher as approved by the department		
GRAD 7090	Design Thesis	0
	Hours	**18**
	Total Hours	**48**

Students must complete a minimum of 3 credit hours of Advanced Technology Topics and 3 credit hours Research Topics History Theory courses.

Students may choose to take electives courses to replace the additional 6 credits of Advanced Technology Topics and Research Topics: History Theory Courses.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

City Planning, M.C.P.

City Planning
Head: Richard Milgrom
Campus Address/General Office: 201 Russell Building
Telephone: 204-474-6578
Fax: 204-474-8769
Email Address: gradarch@umanitoba.ca
Website: umanitoba.ca/architecture/department-city-planning (https://umanitoba.ca/architecture/department-city-planning/)
Academic Staff: Please refer to City Planning website (https://umanitoba.ca/architecture/department-city-planning/) for Faculty information.

City Planning Program Information

The Master of City Planning is a two-year combined academic and professional program.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.C.P. Admission Requirements

Applicants must meet the entrance requirements of the Faculty of Graduate Studies. Please note that City Planning requires English Language Proficiency test scores above the FGS minimum requirement.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.C.P. program of study (https://umanitoba.ca/explore/programs-of-study/city-planning-mcp/) page.

Degree Requirements

The City Planning graduate program offers two streams to complete the degree – one concludes with a Capstone Project, the other a Thesis/Practicum. The program also coordinates a mentorship program with the Manitoba Professional Planners Institute.

Five core courses are required of all students in the program, along with two courses from a roster of option courses. Students in the Capstone Stream are required to complete two electives; those in the

Thesis/Practicum may take electives to support their particular research interests.

Degree requirements: 51 credit hours (Capstone optional); 39 credit hours (Thesis/Practicum Option)

Faculty of Architecture's Cooperative Education/ Integrated Work program (Co-op/I) Graduate Option

Students may apply to the Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) graduate option. Students must complete a minimum of two and maximum of three 4-month work terms to have the Co-op/I option acknowledged on their graduation parchment. For each work term, students must enroll in the appropriate course: ARCG 7150 and, subsequently, ARCG 7250 and/or ARCG 7350. Each course requires submission of a written report and portfolio covering the work completed for the professional assignment. Work term courses are valued at zero credit hours and evaluated as pass/fail. These are above and beyond graduate course requirements. Additional fees will apply.

Expected Time to Graduate: 2 years

Progression Chart

Master of City Planning (Capstone Project)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CITY 7410	Planning Design 1	6
CITY 7020	Planning Methods and Techniques II	3
CITY 7030	Planning Theory 1	3
CITY 7340	Urban Development	3
Select one of the following:		6
CITY 7420	Planning Design 2 (Regional)	
CITY 7430	Planning Design 3 (Urban Design)	
Select two Option Courses and/or Electives		6
	Hours	**27**
Year 2		
CITY 7310	Law and Local Government	3
CITY 7470	Professional Planning Practice	3
CITY 7050	City Planning Capstone	6
Select one of the following:		6
CITY 7420	Planning Design 2 (Regional)	
CITY 7430	Planning Design 3 (Urban Design)	
CITY 7440	Planning Design 4 (Indigenous Planning Studio)	
Select two Option Courses and/or Electives		6
	Hours	**24**
	Total Hours	**51**

Master of City Planning (Thesis/Practicum Stream)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CITY 7410	Planning Design 1	6
CITY 7020	Planning Methods and Techniques II	3
CITY 7030	Planning Theory 1	3
CITY 7340	Urban Development	3
Select one of the following:		6
CITY 7420	Planning Design 2 (Regional)	
CITY 7430	Planning Design 3 (Urban Design)	
Select two Option courses		6
	Hours	**27**
Year 2		
CITY 7310	Law and Local Government	3
CITY 7470	Professional Planning Practice	3
GRAD 7000 or GRAD 7030	Master's Thesis or Master's Practicum	0
Select one of the following:		6
CITY 7420	Planning Design 2 (Regional)	
CITY 7430	Planning Design 3 (Urban Design)	
CITY 7440	Planning Design 4 (Indigenous Planning Studio)	
	Hours	**12**
	Total Hours	**39**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new students must meet with their faculty advisor within the first month of classes. Students with registration issues should meet with the City Planning Graduate Student advisor during the last two weeks in August or first week in September.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Design and Planning, Ph.D.

Design and Planning
Head: Dr. Lisa Landrum
Grad Chair: Dr. Lisa Landrum
Campus Address/General Office: 201 Russell Building, Faculty of Architecture
Telephone: 204-474-8769
Fax: 204-474-7532
Email Address: gradarch@umanitoba.ca
Website: umanitoba.ca/architecture/phd-design-and-planning (https://umanitoba.ca/architecture/phd-design-and-planning/)
Academic Staff: Please refer to the Design and Planning website (https://umanitoba.ca/architecture/phd-design-and-planning/#phd-advisors) for a current listing of PhD advisors.

Design and Planning Program Information

The Faculty of Architecture offers a trans-disciplinary graduate program of study leading to a Doctor of Philosophy degree.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Design and Planning Ph.D. Admission Requirements

Applicants to the Ph.D. in Design and Planning Program must possess the following:

- a Master's degree in a discipline represented by the programs in the Faculty of Architecture (Architecture, City Planning, Environmental Design, Interior Design or Landscape Architecture) or a related field from a recognized institution;
- a cumulative GPA of 3.5 or equivalent in the last two years of full-time university study (60 credit hours);
- evidence of appropriate research capability (a Master's thesis or practicum and/or peer-reviewed publications or presentations);
- a record of appropriate experience in professional practice, post-secondary teaching and/or other pertinent accomplishments and activities.

Admission is contingent on the availability and willingness of a qualified faculty member to supervise the applicant's research and program of studies. Potential applicants must secure consent from an advisor in advance of making a formal application by following the Preliminary Application Process described on the program website.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Design and Planning Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/design-and-planning-architecture-phd/) page.

Degree Requirements

Students must complete a minimum of 12 credit hours at the 7000 level or higher. One 3-credit hour course must address theory and one 3-credit hour course must address methods appropriate to the student's area of study. At least 6 of the 12 credit hours of courses must be taken within the Faculty of Architecture. Students must additionally complete a Candidacy Examination and Thesis Proposal, submit an acceptable Thesis and pass a Thesis Oral Examination.

Expected Time to Graduate: 4-6 years

Progression Chart

All students must maintain a minimum grade point average of 3.5 (B+) with no grade below 3.0 (B).

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Various Coursework [1]		12
	Hours	**12**
Year 2		
GRAD 8010	Doctoral Candidacy Examination [2]	0
Thesis Proposal [3]		0
	Hours	**0**
Year 3		
GRAD 8000	Doctoral Thesis (Research) [4]	0
	Hours	**0**
Year 4		
GRAD 8020	Doctoral Re-registration (as required)	0
GRAD 8020	Doctoral Re-registration (Submission and Oral Defense) [5]	0
	Hours	**0**
	Total Hours	**12**

[1] Appropriate coursework will be determined by the student and advisor and approved by the Ph.D. Program Head. Courses must be at the 7000 level or higher. One 3-credit hour course must address theory and one 3-credit hour course must address methods appropriate to the student's area of study. At least 6 of the 12 credit hours must be taken within the Faculty of Architecture.

2 The Candidacy Examination consists of a formal written review paper(s) and/or research project(s) prepared by the student in response to questions or topics posed by the advisory committee, and an oral presentation by the student followed by questions by the advisory committee. Students must pass both the written and oral components. Students must demonstrate the following: ability to articulate a focused research area; knowledge of significant literature and/or precedents in the area of concentration; understanding and demonstration of suitable research methods.

3 Upon successful completion of the Candidacy Examination, the student may proceed to write and publically defend a Thesis Proposal. This written proposal will normally consist of 50-100 pages. Upon a successful defense, the Thesis Proposal Form is submitted to the Faculty of Graduate Studies.

4 Depending on the topic and methodology, the research and preparation of the Thesis may take 1 - 3 years. The Thesis must constitute a distinct contribution to knowledge in the major field of study and be of sufficient merit to be, in the judgment of the examiners, acceptable for publication.

5 The final version of the thesis must be submitted by the candidate to the Faculty of Graduate Studies following the Thesis Guidelines. All processes for Thesis submission, distribution, identifying external examiners, and the Oral Defense follow Faculty of Graduate Studies regulations.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Interior Design, M.I.D.

Interior Design
Head: Kelley Beaverford
Campus Address/General Office: 201 Russell Building
Telephone: 204-474-8769
Fax: 204-474-7532
Email Address: gradarch@umanitoba.ca
Website: umanitoba.ca/architecture/department-interior-design (https://umanitoba.ca/architecture/department-interior-design/)
Academic Staff: Please see the Interior Design website (https://umanitoba.ca/architecture/department-interior-design/) for Faculty information.

Interior Design Program Information

The department of Interior Design at the University of Manitoba has a long-established reputation for excellence and leads Canada in the development of the first Master of Interior Design program.

The Department offers two streams within the Master of Interior Design:

- The *first-professional program* is directed towards those interested in pursuing a career in Interior Design practice. The program emphasizes the creation of human-centred and context-based design solutions that respond to the needs of contemporary life. The course of studies consists of the design studio and support courses that develop the methods, processes, technical and theoretical foundations of interior design. There are opportunities for international and cross-cultural study through exchange programs and intersession studios. The program requires a minimum of two full years of study to complete.
- The *post-professional program* is directed to those who already hold a first-professional qualification in Interior Design. The program has a research orientation and is intended to further the knowledge base in specific areas of the discipline. The program requires a minimum of one and one half years of full-time study to complete. For additional information on delivery options and length of study requirements contact the department of Interior Design.

The first-professional program is accredited by the Council for Interior Design Accreditation. Graduates normally proceed to certification from the National Council of Interior Design Qualification (N.C.I.D.Q.) and membership in a professional interior design association. Master of Interior Design graduates are qualified to work nationally and internationally at the forefront of their profession, with a skill-set that includes strategic thinking, entrepreneurship, a research orientation and an ethical and environmentally responsible frame of reference.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.I.D. Admission Requirements

FIRST-PROFESSIONAL MASTERS PROGRAM

Applicants with an undergraduate degree in Interior Design or an undergraduate degree in Environmental Design (Interior Environment Option) from the Faculty of Architecture are eligible for direct admission. Applicants with degrees in other fields of study are assessed on a case-by-case basis and may be eligible for admission to a pre-master program of study.

POST-PROFESSIONAL MASTERS PROGRAM

A first-professional degree in Interior Design is required for admission.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.I.D. program of study (https://umanitoba.ca/explore/programs-of-study/interior-design-mid/) page.

Please note that Interior Design requires English Language Proficiency Test scores above the FGS minimum requirement.

Degree Requirements

Post-Professional Stream - 21 Credit Hours

First Professional Stream - 48 Credit Hours

Faculty of Architecture's Cooperative Education/ Integrated Work program (Co-op/I) Graduate Option

Students may apply to the Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) graduate option. Students must complete a minimum of two and maximum of three 4-month work terms to have the Co-op/I option acknowledged on their graduation parchment. For each work term, students must enroll in the appropriate course: ARCG 7150 and, subsequently, ARCG 7250 and/or ARCG 7350. Each course requires submission of a written report and portfolio covering the work completed for the professional assignment. Work term courses are valued at zero credit hours and evaluated as pass/fail. These are above and beyond graduate course requirements. Additional fees will apply.

Expected Time to Graduate: Post-Professional Stream 1.5 years; Professional Stream, 2 years

First-Professional Master of Interior Design

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IDES 7180	Theory Seminar 1 - Contemporary Issues in Design	3
IDES 7200	Masters Studio 1 - Strategic Issues	6
IDES 7210	Masters Studio 2 - Events and Making	6
IDES 7240	Sensory Technology 5	3
IDES 7280	Advanced Topics in Contemporary Interior Design Seminar	3
IDES 7290	Work Experience Program (winter/summer)	0
IDES 7170	Design Research Methods	3
	Hours	**24**
Year 2		
IDES 7000	Graduate Seminar in Interior Design (Pass/Fail)	3
IDES 7190	Theory Seminar 2 - Critical Perspectives	3
IDES 7220	Masters Studio 3	6
IDES 7230	Sensory Technology 4	3
IDES 7250	Professionalism and Practice	3
Select 6 credit hours in Electives (To be taken during the first 2 years of study - Advisor approval required)		6
GRAD 7030	Master's Practicum	0
	Hours	**24**
	Total Hours	**48**

Post-Professional Master of Interior Design

Course	Title	Hours
Years 1-2		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IDES 7170	Design Research Methods	3
IDES 7180	Theory Seminar 1 - Contemporary Issues in Design	3
IDES 7190	Theory Seminar 2 - Critical Perspectives	3
IDES 7280	Advanced Topics in Contemporary Interior Design Seminar	3
Select 9 credit hours of Electives (Advisor approval required)		9
GRAD 7000	Master's Thesis	0
	Hours	**21**
	Total Hours	**21**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new students must contact the Graduate Student Advisor, between mid-August and commencement of classes, who will determine whether a meeting with the Department Head is required. Timetable changes may occur throughout the summer.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Landscape Architecture, M.L.Arch.

Landscape Architecture
Head: Anna Thurmayr
Grad Chair: Anna Thurmayr
Campus Address/General Office: 201 Russell Building
Telephone: 204-474-8769
Fax: 204-474-7532
Email Address: gradarch@umanitoba.ca
Website: umanitoba.ca/architecture/department-landscape-architecture (https://umanitoba.ca/architecture/department-landscape-architecture/)
Academic Staff: Please refer to the Landscape Architecture website (https://umanitoba.ca/architecture/department-landscape-architecture/) for Faculty information.

Landscape Architecture Program Information

The program leading to the Master of Landscape Architecture degree at the University of Manitoba was the first graduate program in Canada.

The M.L.Arch. program is accredited by the Canadian Society of Landscape Architects (CSLA) which has reciprocal recognition from the Landscape Architecture Accreditation Board (LAAB) in the United States. Successful completion of a program accredited by the CSLA/LAAB qualifies graduates to sit the Landscape Architecture Registration Exam (LARE), the North America-wide qualification for professional registration. In Manitoba, having an accredited degree plus two years in practice and passing required sections of the LARE is required for professional registration with the Manitoba Association of Landscape Architects (MALA).

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.L.Arch. Admission Requirements

Students admitted to the program must have one of three different types of degree with a minimum Grade Point Average (or equivalent) of 3.0 from a university recognized by the Faculty of Graduate Studies:

- a 4-year degree in Landscape Architecture from a university recognized by the Faculty of Graduate Studies or a 4-year degree in Environmental Design from the University of Manitoba;
- a 4-year degree in another design discipline from a university recognized by the Faculty of Graduate Studies;
- a 4-year degree in another discipline from a university recognized by the Faculty of Graduate Studies

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.L.Arch. program of study (https://umanitoba.ca/explore/programs-of-study/landscape-architecture-mla/) page.

Degree Requirements

Study is directed towards the analysis, planning, design, management and stewardship of natural and built environments at scales varying from whole regions to small individual sites. The program emphasizes to integrate and apply knowledge of ecology, socio-cultural factors, economics and aesthetics to create environments that are functional, innovative, sustainable, appropriate and attractive.

The Master of Landscape Architecture (MLA) curriculum ranges from 39 credit hours for students who have completed required courses in the Landscape + Urbanism option of the Bachelor of Environmental Design program offered by the Faculty of Architecture to 108 Credit Hours for students with a non-design background.

Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) Graduate Option

Students may apply to the Faculty of Architecture's Cooperative Education/Integrated Work program (Co-op/I) graduate option. Students must complete a minimum of two and maximum of three 4-month work terms to have the Co-op/I option acknowledged on their graduation parchment. For each work term, students must enroll in the appropriate course: ARCG 7150 and, subsequently, ARCG 7250 and/or ARCG 7350. Each course requires submission of a written report and portfolio covering the work completed for the professional assignment. Work term courses are valued at zero credit hours and evaluated as pass/fail. These are above and beyond graduate course requirements. Additional fees will apply.

Expected Time to Graduate: 2-4 years

Progression Chart

MLA 1 (non-design background) students must take Year 1, 2, and 3 courses (108 credit hours)
MLA 2 (design – non B.E.D (L+U)) students must take Year 2, and 3 courses (72 credit hours)
MLA 3 (B.E.D. (L+U)) students must take Year 3 courses (39 credit hours)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
LARC 6150	Landscape Architecture Communication	3
EVLU 3002	Site Planning	3
EVLU 3000	History of Designed Environments	3
EVLU 3004	Ecology and Design 2	3
EVLU 3010	Landscape and Urbanism Theory	3
EVLU 3012	Site Morphology and Grading	3
LARC 7110	Landscape Architecture Studio 1 [1]	9
EVLU 3008	Studio 4: Networks and Infrastructure	9
	Hours	**36**
Year 2		
EVLU 4000	Philosophy, Ethics and Aesthetics	3
EVLU 4002	Construction Materials	3
EVLU 4008	Plants, Ecosystems and Design	3
EVLU 4016	History of Landscape and Urbanism	3
EVLU 4018	Principles of Urban Design	3
LARC 7222	Landscape Architecture Studio 2	9
EVLU 4014	Studio 6: Emergent Futures	9
	Hours	**33**
Year 3		
LARC 7002	Land Construction and Professional Practice	3
LARC 7330	Landscape Architecture Studio 3	9
LARC 7340	Landscape Architecture Studio 4	9
LARC 7250	Landscape Architecture Theory	3
LARC 7040	Design Research (MLA 2 & 1 non B.E.D. [L+U] may take this course in year 2)	3
GRAD 7030	Master's Practicum	0
Select 12 credit hours from the following:		12
LARC 7310	Landscape Design Seminar 1	
LARC 7320	Landscape Design Seminar 2	
ARCG 7102	Studio Topics in Environmental Processes (Summer Session)	
LARC 7020	Field Studies	
	Hours	**39**
Year 4		
GRAD 7030	Master's Practicum [3]	0
	Hours	**0**
	Total Hours	**108**

[1] Review Winter Term studio selection after review of Fall - LARC 7110.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new students should meet with the Department Head and must meet with the Graduate Student Advisor before registering. Returning students with registration issues should make an appointment with the Graduate Student Advisor prior to the first week in September. Courses may be cancelled if there is insufficient enrolment.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

School of Art

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Art and Architectural History, M.A. (https://catalog.umanitoba.ca/graduate-studies/art/art-architectural-history-ma/)	2	18	
Fine Art, M.F.A. (p. 178)	2	27	

Fine Art, M.F.A.

Fine Art
Program Director: Dr. Edward Jurkowski
Campus Address/General Office: Room 313 ARTlab
Telephone: 204-474-9367
Fax: 204-474-7605
Email Address: MFAINFO@umanitoba.ca (soadvise@umanitoba.ca)
Website: umanitoba.ca/art/ (https://umanitoba.ca/art/)
Academic Staff: Please refer to the Fine Art website (https://umanitoba.ca/art/faculty-and-staff-directory/) for Faculty information.

Fine Art Program Information

The School of Art offers a Master of Fine Art in studio practice.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.F.A. Admission Requirements

Persons with a minimum of a four-year degree in fine arts or a four-year degree in another discipline and evidence of artistic experience, with a minimum G.P.A. of 3.0 (B) in the last 60 credit hours of study, may apply for admission to the M.F.A. program. Admission decisions are based on the qualifications of the applicant as well as the ability of the School of Art and the University of Manitoba to serve the applicant's intended program of study and area of specialization.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.F.A. program of study (https://umanitoba.ca/explore/programs-of-study/fine-art-mfa/) page.

Degree Requirements

The program is designed to be completed in two years of full-time study and students are expected to continue their research through the spring and summer. Part-time students are not accepted into the program.

Course	Title	Hours
Required		
STDO 7010	Studio Concentration 1	3
STDO 7020	Studio Concentration 2	3
STDO 7030	Studio Concentration 3	3
STDO 7040	Studio Concentration 4	3
STDO 7110	Graduate Seminar 1	3
STDO 7120	Graduate Seminar 2	3
STDO 7130	Graduate Seminar 3	3
Electives		
Select 6 credit hours of approved graduate level elective courses in the School of Art, or with written permission, in another faculty at the University of Manitoba.		6
Thesis		
GRAD 7200	MFA Thesis/Studio Exhibition	0
Total Hours		**27**

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
STDO 7010	Studio Concentration 1	3
STDO 7020	Studio Concentration 2	3
STDO 7110	Graduate Seminar 1	3
STDO 7120	Graduate Seminar 2	3
COURSE 7XXX	Graduate level (7000) course supporting studio/research	3
	Hours	**15**
Year 2		
STDO 7030	Studio Concentration 3	3
STDO 7040	Studio Concentration 4	3
STDO 7130	Graduate Seminar 3	3
COURSE 7XXX	Graduate level (7000) course supporting studio/research	3
GRAD 7200	MFA Thesis/Studio Exhibition	0
	Hours	**12**
	Total Hours	**27**

Notes:

- MFA Thesis/Studio Exhibition: A written thesis statement and thesis exhibition that shows that the student has developed an original contribution to knowledge in visual art is required. Thesis students must pass an oral examination on the subject of the written statement and exhibition. The exhibition is the primary component of the thesis. This course is graded pass/fail.
- Non-Academic Aspects of the MFA program: MFA students are expected to display a commitment to their studies beyond completion of coursework. Students are expected to enrich their studies by attending exhibitions, lectures by guests at the School of Art or within the broader art community. They are also expected to attend and actively participate in open critiques, their own and those of their fellow students, as well as other program activities.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Faculty of Arts

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Anthropology, M.A. (p. 180)	2	12	
Anthropology, Ph.D. (p. 181)	4	9	
Classics, M.A. (p. 182)	2	12-24	
Economics, M.A. (p. 184)	1-2	15-27	
Economics, Ph.D. (p. 186)	4	27	
English, M.A. (p. 188)	2	18-24	
English, Ph.D. (p. 189)	4	18	
French, M.A. (p. 191)	2	12	
French, Ph.D. (p. 192)	2	12	
German, M.A. (p. 193)	2	15	
History, M.A. (p. 194)	2	18-24	
History, Ph.D. (p. 196)	4	18	
Icelandic, M.A. (p. 197)	2		
Indigenous Studies, M.A. (p. 198)	2	18-21	
Indigenous Studies, Ph.D. (p. 199)	4	12-18	
Linguistics, M.A. (p. 200)	2	18	
Linguistics, Ph.D. (p. 201)	4	18	
Philosophy, M.A. (p. 203)	2	15-24	
Political Studies, M.A. (p. 204)	2	12	
Psychology, M.A. (p. 206)	2-4	15-27	

Psychology, Ph.D. (p. 207)	3-4	12-27
Public Administration, M.P.A. (p. 209)	2	36
Religion, M.A. (p. 210)	2	12-24
Religion, Ph.D. (p. 212)	4	18
School Psychology, M.A. (p. 213)	2-3	54-63
Slavic Studies, M.A. (p. 215)	2	15
Sociology, M.A. (p. 216)	2	18
Sociology, Ph.D. (p. 217)	4	18

Anthropology, M.A.

Anthropology
Head: Derek Johnson
Associate Head: Julia Gamble
Grad Chair: Fabiana Li
Campus Address/General Office: 432 Fletcher Argue Bldg.
Telephone: 204-474-9361
Fax: 204-474-7600
Email Address: anthro@umanitoba.ca
Website: umanitoba.ca/arts/anthropology (https://umanitoba.ca/arts/anthropology/)
Academic Staff: Please refer to the Faculty at umanitoba.ca/arts/anthropology/faculty-and-staff (https://umanitoba.ca/arts/anthropology/faculty-and-staff/)

Anthropology Program Information

The department offers programs leading to the Master of Arts and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Anthropology M.A. Admission Requirements

In addition to the minimum admission requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 79) of this calendar, an advanced (four year) degree in Anthropology is the normal preparation for the M.A. program. Applicants without a background in Anthropology may be recommended for the Pre-Master's Program consisting of up to 18 hours of courses from the undergraduate, and especially the advanced, curriculum.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Anthropology M.A. program of study (https://umanitoba.ca/explore/programs-of-study/anthropology-ma/) page.

Degree Requirements

Students must complete a minimum number of 12 credit hours of coursework at the 7000 level, including at least 9 credit hours of Anthropology courses. In addition a mandatory pass/fail ANTH 7000 Professional Development in Anthropology Course must be taken.

Students must submit an acceptable thesis and pass a thesis oral examination.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANTH 7000	Professional Development in Anthropology	0
ANTH 7XXX	Courses designated ANTH 7000 or above	9
Select a course designated 7000 or above		3
	Hours	**12**
Year 2		
GRAD 7020	Master's Re-registration	0
GRAD 7000	Master's Thesis [1]	0
	Hours	**0**
	Total Hours	**12**

[1] The M.A. thesis proposal must be approved by the advisor and committee.

Certain programs of study within anthropology may require courses outside the Department of Anthropology.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor to determine their course load. Courses must be listed on the departmental approval form (available from the Anthropology general office) and written approval granted from both the Advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult

unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Anthropology, Ph.D.

Anthropology
Head: Derek Johnson
Associate Head: Julia Gamble
Grad Chair: Fabiana Li
Campus Address/General Office: 432 Fletcher Argue Bldg.
Telephone: 204-474-9361
Fax: 204-474-7600
Email Address: anthro@umanitoba.ca
Website: umanitoba.ca/arts/anthropology (https://umanitoba.ca/arts/anthropology/)
Academic Staff: Please refer to the Anthropology website (https://umanitoba.ca/arts/anthropology/faculty-and-staff/) for Faculty list.

Anthropology Program Information

The department offers programs leading to the Master of Arts and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Anthropology Ph.D. Admission Requirements

Applicants to the Ph.D graduate program require a M.A. degree in Anthropology. All requirements for the M.A. degree must be completed. Preference will be given to applicants who have demonstrated independent research competence at the Master of Arts level.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Anthropology Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/anthropology-phd/) page.

Degree Requirements

Students must complete 9 credit hours of coursework at the 7000 level, including at least 6 credit hours of Anthropology courses. In addition a mandatory pass/fail ANTH 7000 Professional Development in Anthropology Course must be taken. Students must defend a thesis proposal, submit an acceptable thesis, and pass a thesis oral examination.

Second language requirement: Ph.D. students are required to pursue training in a language other than English if it is deemed of necessity or benefit to the student's program of study. Determination of language training is made during the first year of the student's program. Language training must be completed prior to the conduct of research activities (post-thesis proposal research activities).

Expected time to graduation: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ANTH 7000	Professional Development in Anthropology	0
ANTH 7XXX	Courses designated ANTH 7000 or above	6
Select a course designated 7000 or above		3
	Hours	**9**
Year 2		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Year 3		
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
Year 4		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**9**

Certain programs of study within anthropology may require courses outside the Department of Anthropology.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must meet with their advisor to determine their course load. Courses must be listed on the departmental approval form (available from the Anthropology general office) and written approval granted from both the Advisor and the department head or designate. Registration revisions are to be dealt with and approved in like manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Classics, M.A.

Classics
Head: James Chlup
Grad Chair: James Chlup
Campus Address/General Office: 364 University College
Telephone: 204-474-9502|
Fax: 204-474-7684
Email Address: classics@umanitoba.ca
Website: umanitoba.ca/arts/classics (https://umanitoba.ca/arts/classics/)
Academic Staff: umanitoba.ca/arts/classics/faculty-and-staff (https://umanitoba.ca/arts/classics/faculty-and-staff/)

Classics Program Information

The department offers a program of study leading to the Master of Arts degree.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Classics M.A. Admission Requirements

Demonstrated proficiency in ancient Greek and Latin and an honours B.A. or its equivalent in Greek, Latin or Classics is a prerequisite for admission to the M.A. Program.

Applicants are normally expected to have completed at least 18 credit hours in ancient Greek and Latin, with no fewer than 6 credit hours in each language. Applicants are also expected to have achieved a cumulative grade-point average of 3.5 in the Greek and Latin courses that they have completed. Applicants without these qualifications but with alternative, relevant expertise in the areas of ancient history or archaeology should contact the graduate chair and/or potential advisors before submitting a formal application. Knowledge of French and/or German is not required but is desirable.

Applicants are assessed on the basis of their transcripts (especially the consistent quality of coursework in Classics and related fields), fit of interests with potential advisors, and a statement of research interests. This statement should be submitted with the formal application and should indicate the applicant's areas of interest for the M.A. research thesis.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Classics M.A. program of study (https://umanitoba.ca/explore/programs-of-study/classics-ma/) page.

Degree Requirements

Students are required to complete 3 credit hours in GRK or LATN courses at the 7000 level, 3 credits of CLAS Archaeology or Ancient History courses at the 7000 level, and 6 additional credit hours at the 7000 level in the area of specialization. In consultation with the advisor, students may elect up to 12 additional credit hours at the 3000, 4000 or 7000 level. The student must complete the thesis/practicum at the University of Manitoba.

Language Reading Requirements: Latin and Greek

Expected Time to Graduate: 2 years

Progression Chart

Master of Arts (Classics) Thesis Route

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CLAS 7XXX	Courses designated CLASS designated CLAS 7000 or above	3
GRK 7XXX or LATN 7XXX	Course designated GRK 7000 and LATN 7000 or above	3
Select courses at the 7000 level in the area of specialization		6
CLAS 7000	Proseminar in Classical Studies 1	0
CLAS 7002	Proseminar in Classical Studies 2	0
Select up to 12 credit hours in Electives [1]		0-12
	Hours	**12-24**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**12-24**

1 In consultation with the advisor, students may elect up to 12 additional credit hours at the 3000, 4000 or 7000 level.

Students develop their thesis proposal in consultation with their advisory committee, normally before the end of the first twelve months in the program.

Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

The M.A. thesis proposal must include a description of the proposed work, a bibliography including both ancient sources and a selection of the modern scholarship, and a schedule of completion. The proposal should normally be completed within 10 months following the start of the program and must be approved by the student's advisor.

Master of Arts (Classics) Major Research Paper Route

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CLAS 7XXX	Courses designated CLASS designated CLAS 7000 or above	3
GRK 7XXX or LATN 7XXX	Course designated GRK 7000 and LATN 7000 or above	3
Select courses at the 7000 level in the area of specialization		6
CLAS 7000	Proseminar in Classical Studies 1	0
CLAS 7002	Proseminar in Classical Studies 2	0
Select up to 12 credit hours at the 3000, 4000 or 7000 level [1]		0-12
	Hours	**12-24**
Year 2		
CLAS 7400	Major Research Paper	0
Select 12 credit hours at the 3000, 4000 or 7000 level [2]		12
	Hours	**12**
	Total Hours	**24-36**

1 In consultation with the advisor, students may elect up to 12 additional credit hours at the 3000, 4000 or 7000 level.

2 Beyond the minimum requirements for the thesis route, students in the Major Research Paper route must take an additional 12 credit hours at the 3000, 4000 or 7000 level, for a total of at least 24 credit hours. At least 18 credit hours of these 24 total hours must be taken at the 7000 level. Courses are selected in consultation with the student's advisor and the Graduate Chair.

Students develop their thesis proposal in consultation with their advisory committee, normally before the end of the first twelve months in the program.

Students will be required to complete a Major Research Paper (MRP). Normally the MRP will be completed in the summer semester after the first two semesters of coursework, prior to commencing the second year of coursework.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

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All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Economics, M.A.

Economics
Head: Umut Oguzoglu
Grad Chair: Julia Witt (Economics & Econometrics); Fletcher Baragar (Economics & Society)
Campus Address/General Office: 501 Fletcher Argue
Telephone: 204-474-6239
Email Address: econgrad@umanitoba.ca
Website: umanitoba.ca/arts/economics (https://umanitoba.ca/arts/economics/)
Academic Staff: Please refer to the Economics website (https://umanitoba.ca/arts/economics/faculty-and-staff/) for Faculty information.

Economics Program Information

The Department of Economics is pleased to offer a Master of Arts and a Doctor of Philosophy program. We also offer Agricultural Economics at the Ph.D. level in conjunction with the Department of Agribusiness and Agricultural Economics as part of the Economics & Econometrics Stream (E&E) Ph.D. program.

The Department has two streams in the graduate program: Economics and Econometrics (E&E), which places greater emphasis on theory (micro and macro), mathematics and statistical methods, and Economics and Society (E&S), which places greater emphasis on how the distribution of wealth and power affects the socioeconomic and physical environment. The graduate program in the E&E stream requires students to take more core courses in theory, mathematics and statistics, while the E&S stream is more individually tailored to the student's research. Applicants to the graduate program in Economics apply to one stream, and are not considered for admission to the other stream. Therefore, applicants are advised to carefully check admission and program requirements to decide which stream provides the best fit.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Economics M.A. Admission Requirements

For consideration for admission to the M.A. program, students proceeding from the University of Manitoba's Pre-M.A. program must have obtained a minimum GPA of 3.5 in at least 24 credit hours of coursework in economics.

Normally, successful applicants for admission to the M.A. program will have completed an Honours degree in economics equivalent to that awarded by the University of Manitoba.

Stream-Specific Admission Requirements

ECONOMICS & ECONOMETRICS STREAM ADMISSION REQUIREMENTS

Applicants should meet the following:

1. A minimum degree GPA of 3.1 from an undergraduate degree that includes fifty-four (54) credit hours of completed economics courses (or, if the applicant has a double Honours degree, 42 credit hours), which shall include:

   Coursework in Mathematical Economics equivalent to the University of Manitoba course ECON 3030, and coursework in Econometrics courses equivalent to ECON 3040 and ECON 4040;
2. A grade of B+ or better is normally required in each upper level undergraduate economic theory course completed; and
3. Six (6) credit hours of mathematics equivalent to the University of Manitoba courses such as: MATH 1500 and MATH 1310.

ECONOMICS & SOCIETY STREAM ADMISSION REQUIREMENTS

Applicants should meet the following:

1. A minimum degree GPA of 3.1 from a four-year undergraduate program; and
2. Completed a minimum of 42 total credit hours in Economics courses.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Economics M.A. program of study (https://umanitoba.ca/explore/programs-of-study/economics-ma/) page.

Degree Requirements

All thesis programs require a minimum of 15 credits hours of coursework in Economics, plus a thesis. All course and research paper programs require a minimum of 27 credit hours of coursework in Economics, plus a research paper.

Expected Time to Graduate: 1 year

Expected Time to Graduate M.A. Thesis Stream: 2 years

Progression Chart

Economics & Econometrics Stream (Non-Thesis)

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 6040	Survey of Mathematical Topics for Economists	3
ECON 7010	Econometrics I	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7000	M.A. Research Workshop	3

ECON 7XXX	Four 3-credit hour Elective Courses [1]	12
Total Hours		**27**

[1] Up to 6 credit hours of elective course work may be at the 4000 level, provided there is not overlap with 7000 level courses.

Economics & Society Stream (Non Thesis)

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 6040	Survey of Mathematical Topics for Economists	3
ECON 7010	Econometrics I [1]	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7540	Advanced History of Economic Thought	3
or ECON 7060	Advanced Heterodox Theory	
ECON 7XXX	Four 3-credit hour Elective Courses [2]	12
Total Hours		**27**

[1] Students without 4000-level Econometrics can substitute ECON 4040 for ECON 7010.

[2] Up to 6 credit hours of elective course work may be at the 4000 level, provided there is not overlap with 7000 level courses.

Notes:

Students must complete a research paper approved by their supervisor. Students should begin to plan writing their papers at the start of the Winter term.

Economics & Econometrics Stream (M.A. Thesis)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 6040	Survey of Mathematical Topics for Economists	3
ECON 7010	Econometrics I	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7XXX	One 3-credit hour Elective Course	3
Select an additional 6 credit hours (at the 3000 level or higher) in a relevant field		6
	Hours	**21**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**21**

Economics & Society Stream Progression Charts (M.A. Thesis)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 6040	Survey of Mathematical Topics for Economists	3
ECON 7XXX	Four 3-credit hour Elective Courses [1]	12
	Hours	**15**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**15**

[1] A student may substitute 3 credit hours of 7000-level coursework from a department other than Economics.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registering, all students must meet with a member of the Economics Department Graduate Studies Committee to determine their course load. The course load resulting from this meeting must be listed on the Departmental Course Approval Form, and the form must be signed by a Graduate Studies committee member. The signed form must be submitted to the Graduate Program Assistant, who will then complete the registration process.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Economics, Ph.D.

Economics
Head: Umut Oguzoglu
Grad Chair: Julia Witt (Economics & Econometrics); Fletcher Baragar (Economics & Society)
Campus Address/General Office: 501 Fletcher Argue
Telephone: 204-474-6239
Email Address: econgrad@umanitoba.ca
Website: umanitoba.ca/arts/economics (https://umanitoba.ca/arts/economics/)
Academic Staff: Please refer to the Economics website (https://umanitoba.ca/arts/economics/faculty-and-staff/) for Faculty information.

Economics Program Information

The Department of Economics is pleased to offer a Master of Arts and a Doctor of Philosophy program. We also offer Agricultural Economics at the Ph.D. level in conjunction with the Department of Agribusiness and Agricultural Economics as part of the Economics & Econometrics Stream (E&E) Ph.D. program.

The Department has two streams in the graduate program: Economics and Econometrics (E&E), which places greater emphasis on theory (micro and macro), mathematics and statistical methods, and Economics and Society (E&S), which places greater emphasis on how the distribution of wealth and power affects the socioeconomic and physical environment. The graduate program in the E&E stream requires students to take more core courses in theory, mathematics and statistics, while the E&S stream is more individually tailored to the student's research. Applicants to the graduate program in Economics apply to one stream, and are not considered for admission to the other stream. Therefore, applicants are advised to carefully check admission and program requirements to decide which stream provides the best fit.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Economics Ph.D. Admission Requirements

Normally, the completion of a Master's degree or equivalent from a recognized university and a cumulative GPA of 3.0 or equivalent in the last two previous years of full time university study (60 credit hours) is the minimum requirement for admission to the Ph.D. program. And:

1. Except as provided in 2) below, applicants for admission to the Ph.D. program must have completed the entrance requirements and the program requirements of an M.A. degree in Economics or in Agricultural Economics equivalent to that awarded by the University of Manitoba. A thesis-based Master's is not required.
2. In exceptional cases, applications to either stream may be considered from students who have completed an Honours degree in Economics equivalent to that awarded by the University of Manitoba. In such cases, the applicant will be required to fulfill, in addition to the requirements below, all coursework requirements for the non-thesis M.A. degree.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Economics Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/economics-phd/) page.

Degree Requirements

Common Program Requirements

PhD students must complete a minimum of 27 credit hours of 7000 level coursework beyond their MA program by the end of their second year in the program including ECON 7010; ECON 7650; and ECON 7722.

Additional Stream-Specific Program Requirements

Economics & Econometrics Stream

Students must complete ECON 7010, ECON 7650, ECON 7660, ECON 7722, and ECON 7732, as part of their core requirement in the first year. Students must also complete a minimum of 12 credit hours of elective Economics courses at the 7000 level by the end of their second year in the program, with at least one elective course taken in their first year of the program.

Research Paper

Students must complete a research paper by May 15th of their second year in the program.

Candidacy Examinations

Students must make their first attempt at the theory candidacy examinations in microeconomic theory and macroeconomic theory at the first opportunity following completion of the theory course requirements. Candidacy exams are written in May and late August / early September.

Thesis Proposal

A thesis proposal must be defended in an oral presentation to the thesis advisory committee, and approval for the proposal must be received by Dec. 15th of the student's third year in the program.

Economics & Society Stream

In addition to the common core course requirements, students must also take:

Course	Title	Hours
ECON 7540	Advanced History of Economic Thought	3
or ECON 7060	Advanced Heterodox Theory	
Select 6 credit hours from the following:		6
ECON 7060	Advanced Heterodox Theory	
ECON 7130	Advanced Development Economics	
ECON 7140	Topics in Development Economics	
ECON 7170	Topics in Heterodox Economics I	
ECON 7180	Topics in Heterodox Economics II	
ECON 7540	Advanced History of Economic Thought	

ECON 7610	Approaches, Methodologies and Techniques in Economic History	
ECON 7690	Structuralist Theories of Development	
Select 9 credit hours of elective course work selected in consultation with the thesis advisor, from Economics or another cognate department, with a minimum of 3 credit hours at the 7000 level		9
Total Hours		**18**

Note: Students without 4000-level econometrics can substitute ECON 4040 for ECON 7010.

Candidacy Examinations

Students will sit for a Candidacy Examination in a subject (or subjects) relevant to their general areas of research. Students must make their first attempt at the Candidacy Examination within the first 30 months of their Ph.D. program, and will normally be scheduled for late August.

Thesis Proposal

The thesis proposal must be defended in an oral presentation to the thesis advisory committee, and must be received within 12 months following the successful completion of the Candidacy Examination.

Expected Time to Graduate: 4 years

Progression Chart

Economics & Econometrics Stream

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 7010	Econometrics I	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7660	Advanced Macroeconomic Theory 2	3
ECON 7732	Advanced Microeconomic Theory II	3
ECON 7XXX	One 3-credit hour Elective Course	3
Candidacy examinations in Microeconomic Theory and Macroeconomic Theory are written in May		
	Hours	**18**
Year 2		
ECON 7XXX	Three 3-credit hour Elective Courses	9
A research paper must be completed by May 15th		
	Hours	**9**
Year 3		
A thesis proposal must be defended and approved by Dec. 15th		
	Hours	**0**
Year 4		
Students defend their thesis to complete the Ph.D.		
	Hours	**0**
	Total Hours	**27**

Economics & Society Stream

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECON 7010	Econometrics I [1]	3
ECON 7650	Advanced Macroeconomic Theory 1	3
ECON 7722	Advanced Microeconomic Theory I	3
ECON 7540 or ECON 7060	Advanced History of Economic Thought or Advanced Heterodox Theory	3
ECON 7XXX	Two 3-credit hour Elective Courses (from list below) [1]	6
	Hours	**18**
Year 2		
ECON 7XXX	Three 3-credit hour Elective Courses [2]	9
Candidacy Examination in a subject (or subjects) relevant to the student's general areas of research will usually be written late August		
	Hours	**9**
Year 3		
A thesis proposal must be defended in an oral presentation to the thesis advisory committee and must be received within 12 months following the successful completion of the Candidacy Examination		
	Hours	**0**
Year 4		
Students defend their thesis to complete the Ph.D.		
	Hours	**0**
	Total Hours	**27**

1. Students without 4000-level Econometrics can substitute ECON 4040 for ECON 7010.
2. A minimum of 3 credit hours must be at the 7000 level.

Elective Courses

Course	Title	Hours
ECON 7060	Advanced Heterodox Theory	3
ECON 7130	Advanced Development Economics	3
ECON 7140	Topics in Development Economics	3
ECON 7170	Topics in Heterodox Economics I	3
ECON 7180	Topics in Heterodox Economics II	3
ECON 7540	Advanced History of Economic Thought	3
ECON 7610	Approaches, Methodologies and Techniques in Economic History	3
ECON 7690	Structuralist Theories of Development	3

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registering, all students must meet with a member of the Economics Department Graduate Studies Committee to determine their course load. The course load resulting from this meeting must be listed on the Departmental Course Approval Form, and the form must be signed by a Graduate Studies committee member. The signed form must be submitted to the Graduate Program Assistant, who will then complete the registration process.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

English, M.A.

English, Theatre, Film & Media
Head: David Watt
Grad Chair: Erin Keating
Campus Address/General Office: 623 Fletcher Argue Building
Telephone: 204-474-7365
Fax: 204-474-7669
Email Address: english@umanitoba.ca
Website: umanitoba.ca/arts/english-theatre-film-media (https://umanitoba.ca/arts/english-theatre-film-media/)
Academic Staff: Please refer to the English, Theatre, Film & Media website (https://umanitoba.ca/arts/english-theatre-film-media/faculty-and-staff/) for Faculty information.

English Program Information

The department offers programs leading to the Master of Arts and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

English M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. Students with a bachelor's degree in English, film, or theatre, but who lack an Honours degree, may apply to enter the Pre-Master's program, which is designed to allow such students to attain the equivalent of an Honours B.A. in English. Contact the Department for further information.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the English M.A. program of study (https://umanitoba.ca/explore/programs-of-study/english-ma/) page.

Degree Requirements

Requirements for the M.A. degree in English can be met in one of two ways; either a thesis (critical or creative) and 18 credit hours of coursework, of which 12 credit hours will normally be graduate English seminars; or 24 credit hours of coursework, normally composed entirely of graduate seminars.

Second Language Reading Requirement: Students are required to have some knowledge of a language other than English. For an MA degree, a grade of C+ or better in 6 credit hours of introductory-level language course(s) satisfies the requirement. See English, Theatre, Film & Media Supplementary Regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for further details.

Expected Time to Graduate: 2 years

Progression Chart

Thesis MA

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENGL 7XXX	Courses designated 7000 or above offered by the Department of English, Theatre, Film & Media	12
Select 6 credit hours at the 3000 or 4000 level in English (or in a related discipline if appropriate to the student's research program)		6

All courses are subject to the approval of the Graduate Chair.

Thesis Proposal (500-700 words, plus bibliography) [1]		
	Hours	**18**
Years 1-2		
Language requirement: either C+ or better in 6 credit hours of auxiliary language coursework at the introductory level, or successful completion of reading test. [2]		0
	Hours	**0**
Year 2		
GRAD 7000	Master's Thesis [3]	0
	Hours	**0**
	Total Hours	**18**

1 Within two months of the successful completion of coursework, and preferably by the end of the second term in the program, the student, in consultation with the Graduate Chair, will name an Advisor who will supervise the student's development of a thesis proposal for submission to the Graduate Chair as soon as possible thereafter. See the English, Theatre, Film & Media Supplementary Regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/).(section 4.8.1)

2 See the English, Theatre, Film & Media Supplementary Regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) (Section 4.8.1)

3 Although the length of the thesis cannot be arbitrarily fixed, the student should aim for between 20,000 and 25,000 words.

Coursework MA

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENGL 7XXX	Courses designated 7000 or above offered by the Department of English, Theatre, Film & Media	18
All courses are subject to the approval of the Graduate Chair.		
	Hours	**18**
Years 1-2		
ENGL 7XXX	Courses designated 7000 or above offered by the Department of English, Theatre, Film & Media	6
Language requirement: either C+ or better in 6 credit hours of auxiliary language coursework at the introductory level, or successful completion of reading test. [1]		0
	Hours	**6**
	Total Hours	**24**

1 See the English, Theatre, Film & Media Supplementary Regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/).(section 4.4.4)

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students (new and returning) must have their courses approved by the graduate chair prior to registering. Any courses added/dropped/changed must be at all times approved by the graduate chair. Only those courses that have been approved will be credited to your program. Courses are subject to cancellation if there is insufficient enrolment.

Students are reminded that they must satisfy the language requirement prior to scheduling their thesis defence.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

English, Ph.D.

English, Theatre, Film & Media
Head: David Watt
Grad Chair: Erin Keating
Campus Address/General Office: 623 Fletcher Argue Building
Telephone: 204-474-7365
Fax: 204-474-7669
Email Address: english@umanitoba.ca
Website: umanitoba.ca/arts/english-theatre-film-media (https://umanitoba.ca/arts/english-theatre-film-media/)

Academic Staff: Please refer to the English, Theatre, Film & Media website (https://umanitoba.ca/arts/english-theatre-film-media/faculty-and-staff/) for Faculty information.

English Program Information

The department offers programs leading to the Master of Arts and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

English Ph.D. Admission Requirements

Applicants must normally hold an M.A. degree in English with a GPA of at least 3.5 in their work at the M.A. level.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the English Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/english-phd/) page.

Degree Requirements

The first year of full-time Ph.D. study will normally include 18 credit hours, at least 12 credit hours of which should be graduate seminars in English literature. This program of studies will be arranged in consultation with the student's advisory committee at a meeting that will take place no later than one week before the start of classes.

Candidacy examinations, consisting of a paper on the student's period of specialization and a paper on the research area, will normally be written in the second year of Ph.D. study. Each paper will be followed by a one-hour oral examination.

Second Language Reading Requirement: Graduate students are required to have some knowledge of a language other than English. For PhD degree, a grade of C+ or better in, normally, 6 undergraduate credit hours of (2000 level or equivalent) courses satisfies the requirement.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ENGL 7XXX	Courses designated 7000 or above offered by the Department of English, Theatre, Film & Media	12
Select 6 credit hours at the 3000 level or above in any department.		6
All courses are subject to the approval of the Graduate Chair and the Exploratory Committee.		
	Hours	**18**
Year 2		
GRAD 8010	Doctoral Candidacy Examination [1]	0
November: Period Exam		
May: Special Area Exam		
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
Thesis Proposal [2]		
Language Requirement: either C+ or better in 6 credit hours of auxiliary language coursework at the intermediate (2000) level, or successful completion of reading test. [3]		
Thesis Research and Writing [4]		
	Hours	**0**
	Total Hours	**18**

1. All students must sit for two Candidacy Examinations: a Period Examination and a Special Area Examination. Students in their second year of study in the doctoral program will write and orally defend their Period Examination in November and their Special Area Examination in May. See English, Theatre, Film & Media Supplementary Regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) section 5.8 for details.
2. See English, Theatre, Film & Media Supplementary Regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) section 5.9 for details.
3. See English, Theatre, Film & Media Supplementary Regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) section 5.4.1 for details.
4. See English, Theatre, Film & Media Supplementary Regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) section 5.10 for details.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students (new and returning) must have their courses approved by the graduate chair prior to registering. Any courses added/dropped/changed must be at all times approved by the graduate chair. Only those courses that have been approved will be credited to your program. Courses are subject to cancellation if there is insufficient enrolment.

Students are reminded that they must satisfy the language requirement prior to scheduling their thesis defence.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

French, M.A.

French, Spanish and Italian
Head: Maria Inés Martinez
Grad Chair: Dominique LaPorte
Campus Address/General Office: 431 Fletcher Argue Building
Telephone: 204-474-9313
Fax: 204-474-7578
Email Address: fsi@umanitoba.ca
Website: umanitoba.ca/fsi/ (https://umanitoba.ca/fsi/)
Academic Staff: Please refer to the French, Spanish and Italian website (https://umanitoba.ca/faculties/arts/departments/fsi/staff/) for Faculty information.

French, Spanish and Italian Program Information

For over 50 years the Department of French, Spanish and Italian has offered Master of Arts and Doctor of Philosophy programs in French.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

French M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. Students with other degrees or backgrounds may be eligible for admission to a pre-Master's program to the satisfaction of the department. Contact the Department for further information.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the French M.A. program of study (https://umanitoba.ca/explore/programs-of-study/french-ma/) page.

Degree Requirements

Students are required to complete 12 credit hours of coursework at the 7000 level and a thesis. Part of the required coursework includes three credit hours of literary theory.

Expected Time to Graduate: 1 - 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
FREN 7XXX	Course in critical theory	3
COURSE 7XXX	Courses designated 7000 or above [1]	9
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**12**

1 Up to 6 credits can be taken in an area outside of the department, with permission from the graduate chair.

2 A minimum of 60 typed pages double spaced in 12-pt font with no more than 2.5 cm margins. The thesis must be written in French.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and newly admitted students must consult with the graduate chair or the department head prior to registration. Students must fill out a pre-registration form which must be signed by the graduate chair or department head and submitted to the Graduate Program Assistant, who will then complete the registration process.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

French, Ph.D.

French, Spanish and Italian
Head: Maria Inés Martinez
Grad Chair: Dominique LaPorte
Campus Address/General Office: 431 Fletcher Argue Building
Telephone: 204-474-9313
Fax: 204-474-7578
Email Address: fsi@umanitoba.ca
Website: umanitoba.ca/fsi/ (https://umanitoba.ca/fsi/)
Academic Staff: Please refer to the French, Spanish and Italian website (https://umanitoba.ca/faculties/arts/departments/fsi/staff/) for Faculty information.

French, Spanish and Italian Program Information

For over 50 years the Department of French, Spanish and Italian has offered Master of Arts and Doctor of Philosophy programs in French.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

French Ph.D. Admission Requirements

Applicants to the Ph.D. program must normally hold an M.A. degree in French with a GPA of at least 3.0 in their M.A. courses.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the French Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/french-phd/) page.

Degree Requirements

Candidates must complete 12 credit hours of coursework at the 7000 level, including a compulsory component of three credit hours of literary theory.

Candidacy examinations consist of one research paper in a distinct area related to the thesis topic, followed by an oral examination. These examinations will normally be completed in the second year of study.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
FREN 7XXX	Course in critical theory	3
COURSE 7XXX	Courses designated 7000 or above [1]	9
	Hours	**12**
Year 2		
GRAD 8000	Doctoral Thesis [2]	0
	Hours	**0**
	Total Hours	**12**

1. Up to 6 credits can be taken in an area outside of the department, with permission from the graduate chair.
2. The thesis must be written in French.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and newly admitted students must consult with the graduate chair or the department head prior to registration. Students must fill out a pre-registration form which must be signed by the graduate chair or department head and submitted to the Graduate Program Assistant, who will then complete the registration process.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

German, M.A.

German and Slavic Studies
Head: Alexandra Heberger
Campus Address/General Office: 328 Fletcher Argue Building
Telephone: 204-474-9151
Email Address: german_slavic@umanitoba.ca
Website: umanitoba.ca/arts/german-slavic-studies (https://umanitoba.ca/arts/german-slavic-studies/)
Academic Staff: Please refer to the German and Slavic Studies website (https://umanitoba.ca/arts/german-slavic-studies/faculty-and-staff/) for Faculty information.

German and Slavic Studies Program Information

The department offers programs of study leading to the Master of Arts degree in the fields of German (Culture, Literature, Second Language Acquisition) and Slavic Studies (Russian and/or Ukrainian Culture, Literature). Programs must be arranged in consultation with the Graduate Chair of the department.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. Students with other degrees or backgrounds may be eligible for admission to a Pre-Master's program to the satisfaction of the department.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

The Pre-Master's year will normally consist of 24 credit hours of coursework, of which at least 12 are in the major discipline. At most, one grade of C+ in a course of six credit hours, or two grades of C+ in courses of three credit hours, will be permitted.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the German M.A. program of study (https://umanitoba.ca/explore/programs-of-study/german-and-slavic-studies-ma/) page.

Degree Requirements

Students fulfill the requirements for the Master's degree by doing a combination of coursework and thesis. A minimum of 15 credit hours of coursework is required, including GRMN 7200 and 6 other credit hours at the 7000 level in the student's major discipline. The remaining 6 credit hours, designated as ancillary credit, may be taken at the 7000, 4000, 3000 (or in exceptional circumstances the 2000) level and may be in courses in the student's major discipline, or in another program or department, at the discretion of the chair of the Graduate Studies Committee. A thesis prospectus must be submitted to the candidate's M.A. advisor a minimum of two months before the thesis is submitted to the M.A. Committee.

Students in the M.A. in German who received credit for the course GRMN 4200 have already fulfilled the requirement for GRMN 7200 and can replace GRMN 7200 with 3 other credit hours at the 7000 level.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

GRMN 7200	Literary and Cultural Theory	3
COURSE XXXX	Course related to student's major discipline	6
COURSE XXXX	Ancillary Credit [1]	6
	Hours	**15**
Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**15**

1 The remaining 6 credit hours, designated as ancillary credit, may be taken at the 7000, 4000, 3000 (or in exceptional circumstances the 2000) level and may be in courses in the student's major discipline, or in another program or department, at the discretion of the Chair of Graduate Studies Committee.

2 Thesis proposal for submission at the end of the first year of study and, at minimum, two months before the thesis is submitted to the Thesis Examining Committee.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration in German or Slavic Studies, students must consult with the graduate chair or the department head.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

History, M.A.

History
Head: Roisin Cossar
Grad Chair: Ryan Eyford (UW)
Campus Address/General Office: 403 Fletcher Argue Building
Telephone: 204-474-8401
Email Address: history@umanitoba.ca
Website: umanitoba.ca/arts/history (https://umanitoba.ca/arts/history/)
Academic Staff: Please refer to the History website (https://umanitoba.ca/arts/history/faculty-and-staff/) for current staff listing.

History Program Information

The department offers programs leading to both the Master of Arts and the Doctor of Philosophy degrees. The M.A. program (referred to as the Joint Master's Program or JMP) is a joint degree program offered by the History departments of the University of Manitoba and the University of Winnipeg. Students have the educational and financial resources of both institutions available to them.

Joint Master's Program

The University of Manitoba and The University of Winnipeg together offer the Joint Master's program, with courses and thesis direction (if applicable) offered at both institutions. Students of a JMP are admitted by the Faculty of Graduate Studies at the University of Manitoba. Graduates of Joint Master's programs receive a joint-institution parchment. Students in the JMP may elect to attend the convocation of either of the two participating universities. The programs are governed by the Joint Discipline Committee (JDC) at the department/unit level, consisting of faculty members of both institutions.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

History M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to

be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the History M.A. program of study (https://umanitoba.ca/explore/programs-of-study/history-ma/) page.

Degree Requirements

Students may choose among four versions of the program: first, a course-based M.A.; second, a Major Research Paper M.A.; third, a thesis-based M.A; and fourth, an M.A. in Archival Studies.

The course-based M.A. requires 21 credit hours of coursework, including HIST 7110 plus 15 credit hours of which of least 12 credit hours must be at the 7000-level in History courses. 3 credit hours may be taken at the 4000 level if course is outside of History. In addition, the student is required to select a major field, and must pass both a written and oral comprehensive examination in that field.

The Major Research Paper M.A. requires 21 credit hours of coursework, including HIST 7110 plus 15 credit hour of which at least 12 credit hours must be at the 7000-level in History courses. 3 credit hours may be taken at the 4000 level if course is outside of History. In addition, the student is required to write a Major Research Paper of approximately 8,000-10,000 words.

The thesis-based M.A. requires 12 credit hours of coursework at the 7000-level including HIST 7110, courses are selected from two areas of historical study and the presentation of a thesis.

The Archival Studies M.A. requires 21 credit hours of courses including HIST 7372, HIST 7382 & HIST 7110, a 3 credit hour elective course at the 7000-level normally in History, an Internship (HIST 7394) and a Major Research Paper of approximately 8,000-10,000 words.

Second Language Reading Requirement: All graduate students in History are required to demonstrate a reading knowledge of a second language. Candidates who specialize in Canadian History must display a reading knowledge of French and English. Texts for translations are chosen by the History department. Examinations are conducted by faculty in the language departments at the University of Manitoba.

Expected Time to Graduate: 4 years

Progression Chart

Thesis MA

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HIST 7110	Advanced Historical Methodologies	6
HIST 7XXX	Advanced Studies in XXX History	6
Thesis:		
May (or sooner if possible): Submission of Thesis proposal 9 months after entering program		
June: Begin research on Thesis		
	Hours	**12**
Year 2		
FREN 1XXX	Introductory French course to fulfill language requirement	6
Thesis:		
September - April: Research & writing of Thesis in consultation with advisor		
By 15 May: Submit Thesis to examining committee		
July: Oral defense of Thesis		
August: Completion of revisions & submit final version of Thesis to MSpace		
	Hours	**6**
	Total Hours	**18**

Major Research Paper MA

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HIST 7110	Advanced Historical Methodologies	6
HIST 7XXX	Advanced Studies in History	6
HIST 7YYY	Advanced Studies in History	6
HIST 7ZZZ/HIST 4XXX	Advanced Studies in History	3
Major Research Paper (MRP):		
May: Begin research on MRP		
	Hours	**21**
Year 2		
FREN 6000	French Reading Knowledge	0
Major Research Paper (MRP):		
September - April: Research & writing of MRP		
HIST 7776	Major Research Paper	0
	Hours	**0**
	Total Hours	**21**

Coursework MA

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HIST 7110	Advanced Historical Methodologies	6
HIST 7XXX	Advanced Studies in History	6
HIST 7YYY	Advanced Studies in History	6
HIST 7ZZZ/4XXX	Advanced Studies in History	3
FREN 6000	French Reading Knowledge	0
March-April	Development of Comprehensive Reading List in consultation with major field supervisor	
May-July	Preparation for Comprehensive Exam	
August	Written Comprehensive Exam	
August	Oral Comprehensive Exam	
Total Hours		**21**

Archival Studies MA

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
HIST 7372	History of Archiving and Archival Records	6
HIST 7382	Archiving in the Digital Age	6
HIST 7110	Advanced Historical Methodologies	6
	Hours	**18**
Year 2		
FREN 6000	French Reading Knowledge	0
HIST 7776	Major Research Paper	0
HIST 7394	Internship in Archival Studies	0
HIST 7XXX	7000 level History elective (Fall term)	3
	Hours	**3**
	Total Hours	**21**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to see the chair or department head prior to attempting to register.

Students may only register for courses listed and approved on the Departmental Graduate Student Registration Form, available at the time of your meeting with the graduate chair. Any course registration revisions (addition and/or withdrawals) must be approved in the same manner. Your program, including the registration of the right courses, is your responsibility.

Joint Master's and Ph.D. students may take 4000- and 7000- level courses offered by the Department of History at the University of Winnipeg. Consult the History Department, University of Manitoba for information on course offerings and registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

History, Ph.D.

Head: Roisin Cossar
Grad Chair: Julie Guard
Campus Address/General Office: 403 Fletcher Argue Building
Telephone: 204-474-8401
Email Address: history@umanitoba.ca
Website: umanitoba.ca/arts/history (https://umanitoba.ca/arts/history/)
Academic Staff: Please refer to the History website (https://umanitoba.ca/arts/history/faculty-and-staff/) for current staff listing.

History Program Information

The department offers programs leading to both the Master of Arts and Doctor of Philosophy Degrees. The M.A. program (referred to as the Joint Master's Program or JMP) is a joint degree program offered by the History departments of the University of Manitoba and the University of Winnipeg. Students have the educational and financial resources of both institutions available to them.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

History Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the History Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/history-phd/) page.

Degree Requirements

Doctoral candidates are usually expected to take 18 credit hours of History coursework at the 7000 level (a minimum of 12 credit hours at the 7000 level in History is required); take candidacy exams in three fields of historical inquiry; and, present an original dissertation which makes a distinct contribution to historical knowledge, based on primary sources.

Second Language Requirement: All graduate students in History are required to demonstrate a reading knowledge of a second language. Candidates who specialize in Canadian History must display a reading knowledge of French and English. Texts for translations are chosen by the History department. Examinations are conducted by faculty in the language departments at the University of Manitoba.

Expected Time to Graduate: 6 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
HIST 7XXX	Advanced Studies in History	6
HIST 7YYY	Advanced Studies in History	6
HIST 7ZZZ/HIST 4XXX	Advanced Studies in History	6
FREN 6000	French Reading Knowledge (Pass/Fail)	0
Candidacy Exams:		
September (upon registration): Select courses which provide best preparation for candidacy exams		
September - August (or sooner if possible): Create reading lists to guide self-directed studies in preparation for exams		
August (or sooner): Submit reading lists to Graduate Executive Committee for approval		
	Hours	**18**
Year 2		
Candidacy Exams:		
September - May: Reading in preparation for exams		
GRAD 8010	Doctoral Candidacy Examination	0
Doctoral Equivalency Exam - written exams in 1 major & 2 minor fields (Pass/Fail)		
1 oral exam - taken after successfully passing written exams		
	Hours	**0**
Years 2-3		
Doctoral Dissertation:		
May - September: Proposal written in consultation with advisor and advisory committee		
No later than September: Submission of proposal		
GRAD 8000	Doctoral Thesis	
	Hours	**0**
Years 3-4		
September - April	Dissertation - research & writing continues	
May 1	Submit dissertation to examining committee	
July	Oral defence	
GRAD 8000	Doctoral Thesis (Completion of revisions & submit final version to MSpace)	
	Hours	**0**
	Total Hours	**18**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to see the chair or department head prior to attempting to register.

Students may only register for courses listed and approved on the Departmental Graduate Student Registration Form, available at the time of your meeting with the graduate chair. Any course registration revisions (addition and/or withdrawals) must be approved in the same manner. Your program, including the registration of the right courses, is your responsibility.

Pre-Master's, Joint Master's and Ph.D. students may take 4000- and 7000-level courses offered by the Department of History at the University of Winnipeg. Consult the History Department, University of Manitoba for information on course offerings and registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

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All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Icelandic, M.A.

Head: P.J. Buchan (Acting)

Campus Address/General Office: 357 University College
Telephone: (204) 474 8487
Fax: (204) 261 0021
Email Address: um_icelandic@umanitoba.ca
Website: umanitoba.ca/arts/icelandic (https://umanitoba.ca/arts/icelandic/)
Academic Staff: Please refer to the website (https://umanitoba.ca/arts/icelandic/faculty-and-staff/) for Faculty information.

Icelandic Program Information

Note: Admission to this program is currently suspended.

The Department of Icelandic offers innovative and challenging programs of study leading up to the Master of Arts degree.

Application Information

Applications are currently not being taken for this program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Degree Requirements

Requirements for the M.A. degree include a thesis and three courses (18 credit hours) at the 7000 level in the Icelandic Department.

Second Language Reading Requirement: Yes

Expected Time to Graduate: 2 years

Indigenous Studies, M.A.

Indigenous Studies
Head: Dr. Lorena Fontaine
Grad Chair: Dr. David Parent
Campus Address/General Office: 215 Isbister Bldg
Telephone: 204-474-9899
Fax: 204-474-7657
Website: umanitoba.ca/arts/indigenous-studies (https://umanitoba.ca/arts/indigenous-studies/)
Academic Staff: Please refer to the Indigenous Studies (https://umanitoba.ca/arts/indigenous-studies/faculty-and-staff/) website for academic staff.

Indigenous Studies Program Information

For students who wish to engage in primary research, the Graduate Program in Indigenous Studies provides opportunities that lead to a Master of Arts or Doctor of Philosophy degree.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Indigenous Studies M.A. Admission Requirements

For students to be admitted directly into the Master's program, they are required to have the equivalent of an advanced/honours degree with a major in Indigenous Studies. Students with majors in other fields may apply if they have 30 credit hours in courses relating to Indigenous studies. Students who do not meet this equivalency will be required to take additional courses to meet the requirement for 30 credit hours of Indigenous Studies courses.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Indigenous Studies M.A. program of study (https://umanitoba.ca/explore/programs-of-study/indigenous-studies-ma/) page.

Degree Requirements

The program offers two options:

- Thesis route consisting of 12 credit hours of required and 6 credit hours of additional coursework, and a thesis.
- Major Research Paper (MRP) route, consisting of 12 credit hours of required courses and 9 credit hours of additional coursework, and a major research paper.

Expected Time to Graduate: 2 years

Progression Chart

THESIS ROUTE

Course	Title	Hours
INDG 7230	Methodology and Research Issues in Indigenous Studies	3
INDG 7240	Issues in Colonization	3
INDG 7250	Culture: Theory and Praxis	3
INDG 7280	Indigenous Studies Colloquia (Colloquia section)	1
INDG 7280	Indigenous Studies Colloquia (Seminar section)	1
INDG 7280	Indigenous Studies Colloquia (Presentation section)	1
Select 6 credit hours at the 4000 level or above [1]		6
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Total Hours		**18**

Major Research Paper Route

Course	Title	Hours
INDG 7230	Methodology and Research Issues in Indigenous Studies	3
INDG 7240	Issues in Colonization	3
INDG 7250	Culture: Theory and Praxis	3
INDG 7280	Indigenous Studies Colloquia (Colloquia section)	1
INDG 7280	Indigenous Studies Colloquia (Seminar section)	1
INDG 7280	Indigenous Studies Colloquia (Presentation section)	1
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select 9 credit hours at the 4000 level or above [1]		9

INDG 7110	Major Research Paper	0
Total Hours		**21**

[1] INDG 7220 may be taken more than once.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with the Graduate Program Chair to determine their course load. Prior to registering, students must have written approval from the Graduate Program Chair to take selected courses. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Indigenous Studies, Ph.D.

Indigenous Studies
Head: Dr. Lorena Fontaine
Grad Chair: Dr. David Parent
Campus Address/General Office: 215 Isbister Bldg
Telephone: 204-474-9899
Fax: 204-474-7657
Website: umanitoba.ca/arts/indigenous-studies (https://umanitoba.ca/arts/indigenous-studies/)
Academic Staff: Please refer to the Indigenous Studies (https://umanitoba.ca/arts/indigenous-studies/faculty-and-staff/) website for academic staff.

Indigenous Studies Program Information

For students who wish to engage in primary research, the Graduate Program in Indigenous Studies provides opportunities that lead to a Master of Arts or Doctor of Philosophy degree.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Indigenous Studies Ph.D. Admission Requirements

For students to be admitted directly into the Ph.D. program, they are required to have a Master's degree in Indigenous Studies or a Master's degree in a related discipline as determined by the Indigenous Studies Graduate Committee. A high academic standing in previous university work, including a minimum grade point average of 3.50 in the last 60 credit hours of course work, is also required.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Indigenous Studies Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/indigenous-studies-phd/) page.

Degree Requirements

All doctoral students will be required to complete 12 credit hours of course work at the 7000 level.

Course	Title	Hours
INDG 7230	Methodology and Research Issues in Indigenous Studies	3
INDG 7280	Indigenous Studies Colloquia (Colloquia section)	1
INDG 7280	Indigenous Studies Colloquia (Seminar Section)	1
INDG 7280	Indigenous Studies Colloquia (Presentation section)	1
Select 6 credit hours at the 7000 level		6
Select 6 credit hours in an Indigenous language if this requirement has not already been satisfied		0-6
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
Total Hours		**12-18**

A minimum of 50% of the required 12 credit hours must be completed within the Indigenous Studies department.

Upon completion of coursework, students must also complete a Candidacy Exam, and develop and deliver a thesis project of approximately five-six chapters and 150-250 pages in length (although some circumstances may vary).

Second Language Reading Requirement: 6 credit hours P/F in any Indigenous language

Expected Time to Graduate: 4 years

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must meet with the Graduate Program Chair to determine their course load. Prior to registering, students must have written approval from the Graduate Program Chair to take selected courses. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Linguistics, M.A.

Linguistics
Head: Nicole Rosen
Grad Chair: Terry Janzen
Campus Address/General Office: 534 Fletcher Argue Building
Telephone: 204-474-9596
Email Address: lingdpt@umanitoba.ca
Website: umanitoba.ca/arts/linguistics (https://umanitoba.ca/arts/linguistics/)
Academic Staff: Please refer to the Linguistics website (https://umanitoba.ca/arts/linguistics/faculty-and-staff/) for current staff listing.

Linguistics Program Information

The Department of Linguistics offers individualized and flexible graduate programs leading to both the Master of Arts and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Linguistics M.A. Admission Requirements

The M.A. program in Linguistics is strongly research-oriented; admission decisions are, therefore, based only in part on the applicant's academic record; the department's resources and interests also play an important role. A four-year B.A. in linguistics is the normal preparation for the M.A. program. Students without such preparation may be required to complete the Pre-Master's year first.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Linguistics M.A. program of study (https://umanitoba.ca/explore/programs-of-study/linguistics-ma/) page.

Degree Requirements

The Master of Arts program in Linguistics requires 18 credit hours of coursework at the graduate level, including Field Methods (LING 7650),

Phonology (LING 7550), and Syntax (LING 7630). The remaining courses (9 credit hours) may be taken in either linguistics or related disciplines, subject to approval by the department's graduate committee. In certain cases the graduate committee may require the student to take additional courses. Students are encouraged to complete their coursework by the end of the first year of the program. M.A. candidates must demonstrate proficiency in a second language. In addition to coursework and the language reading requirement, students must complete and successfully defend a thesis.

Second Language Reading Requirement: Yes

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
LING 7550	Phonology	3
LING 7650	Field Methods	3
LING 7630	Syntax	3
LING 7XXX	Courses in LING 7000	9
	Hours	**18**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

Notes:

- Students must demonstrate proficiency in a second language.
- Students must propose, write, and defend an original thesis.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their program advisor/thesis supervisor to determine course load. These courses must be approved by the department's Graduate Committee. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Linguistics, Ph.D.

Linguistics
Head: Nicole Rosen
Grad Chair: Terry Janzen
Campus Address/General Office: 534 Fletcher Argue Building
Telephone: 204-474-9596
Email Address: lingdpt@umanitoba.ca
Website: umanitoba.ca/arts/linguistics (https://umanitoba.ca/arts/linguistics/)
Academic Staff: Please refer to the Linguistics website (https://umanitoba.ca/arts/linguistics/faculty-and-staff/) for current staff listing.

Linguistics Program Information

The Department of Linguistics offers individualized and flexible graduate programs leading to both the Master of Arts and the Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Linguistics Ph.D. Admission Requirements

The Ph.D. program in linguistics is strongly research-oriented; admission decisions are, therefore, based only in part on the applicant's academic

record; the department's resources and interests also play an important role. Students with a Master's degree in linguistics from the University of Manitoba or with an equivalent degree from elsewhere may be admitted into the Ph.D. program. Students who have a Master's degree but lack the specific course background for admission to the Ph.D. program may be admitted into the M.A. program. After completion of the M.A. course requirements with an average of B+ such students may apply to transfer directly to the Ph.D. program without completing the M.A.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Linguistics Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/linguistics-phd/) page.

Degree Requirements

Ph.D. students will normally complete 18 credit hours coursework at the graduate level. Courses are to be chosen in consultation with the advisor and students are encouraged to complete them by the end of the first year of the program.

Candidacy Exams

Candidacy Exams are normally written in the second year of the Program. These exams consist of two original research papers of publishable quality in distinct areas of linguistics. Students must pass an oral exam based on each of the two papers.

Ph.D. candidates must demonstrate proficiency in a second language. This will at the same time satisfy the language reading requirement of the Faculty of Graduate Studies. Students who have satisfied this requirement at the M.A. level will be deemed to have met this requirement at the Ph.D. level.

Students must complete and successfully defend a dissertation. In preparation for this step, a written dissertation proposal must be presented and defended orally, normally in the third year.

Second Language Reading Requirement: Yes

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
LING 7550	Phonology	3
LING 7630	Syntax	3
LING 7650	Field Methods	3
LING 7XXX	Courses in LING at 7000	9
	Hours	**18**
Year 2		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
Year 3		
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
	Total Hours	**18**

Notes:

- Students must demonstrate proficiency in a second language.
- Students must propose, write, and defend an original dissertation.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their program advisor/thesis supervisor to determine course load. These courses must be approved by the department's Graduate Committee. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Philosophy, M.A.

Philosophy
Head: Rhonda Martens
Campus Address/General Office: 450 University College
Telephone: 204-474-8426
Email Address: philosophy@umanitoba.ca
Website: umanitoba.ca/arts/philosophy (https://umanitoba.ca/arts/philosophy/)
Academic Staff: Please refer to the Philosophy website (https://umanitoba.ca/arts/philosophy/faculty-and-staff/) for staff information.

Philosophy Program Information

The University of Manitoba offers a Master of Arts degree in philosophy.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Philosophy M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Philosophy M.A. program of study (https://umanitoba.ca/explore/programs-of-study/philosophy-ma/) page.

Degree Requirements

Students have three options:

- 15 credit hours in Philosophy, and a major thesis; or
- 18 credit hours in Philosophy, and two research papers; or
- 24 credit hours in Philosophy.

Every candidate for the Master's degree in philosophy must satisfy a competency requirement in formal logic. The requirement may be satisfied in either of two ways:

1. By completing course PHIL 2200 Intermediate Logic (3), or an equivalent course, with a grade of B+ or better. The course will be classified as "auxiliary" (indicated as "X" on the student's transcript); or
2. By passing a logic competency examination, which normally will be scheduled in December, March and August.

Second Language Reading Requirement: A reading knowledge of one foreign language will be required if the thesis topic requires it.

Expected Time to Graduate: Students with undergraduate concentration in Philosophy equivalent to approximately nine full courses (54 credit hours) can complete the M.A. degree in one year. Students with a lesser degree of undergraduate concentration will need more than one year to complete the degree.

Progression Chart

Thesis Option

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHIL 7XXX	Courses designated PHIL 7000 or above	6
PHIL 3XXX	Courses designated PHIL 3000 or above	9
Requires completion of one (1) thesis paper approximately 80-100 pages in length		
Total Hours		**15**

Research Papers Option

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHIL 7XXX	Courses designated PHIL 7000 or above	12
PHIL 3XXX	Courses designated PHIL 3000 or above	6
Requires completion of two (2) individual research papers, each approximately 40-50 pages in length		
Total Hours		**18**

Coursework Option

Course	Title	Hours
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHIL 7XXX	Courses designated PHIL 7000 or above	18
PHIL 3XXX	Courses designated PHIL 3000 or above	6
No additional paper required		
Total Hours		**24**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students (new and returning) in the Master's and pre-Master's programs of the Department of Philosophy must have their courses approved by the graduate chair prior to registering. Students may only register for, and will only receive credit for, those courses approved by the graduate chair.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult

unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Political Studies, M.A.

Political Studies
Acting Head: Dr. Steven Lecce
Chair: Dr. Bryan Peeler
Campus Address/General Office: 532 Fletcher Argue
Telephone: 204-474-9733
Fax: 204-474-7585
Email Address: Political.Studies@umanitoba.ca (Political_Studies@umanitoba.ca)
Website: umanitoba.ca/arts/political-studies (https://umanitoba.ca/arts/political-studies/)
Academic Staff: Please refer to the Political Studies website (https://umanitoba.ca/arts/political-studies/faculty-staff/) for staff information.

Political Studies Program Information

The Department of Political Studies offers a Pre-Master's year, a Master of Arts degree program, as well as a Masters in Public Administration program jointly offered with the University of Winnipeg.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Political Studies M.A. Admission Requirements

Normally, to be considered for admission to the M.A program in Political Studies, applicants must have successfully completed either the Department's Pre-M.A program, as outlined below, or a B.A (Honours) Program in Political Studies. To be considered for admission, applicants holding a B.A (Honours) degree are expected to have maintained a grade point average of 3.5 (B+) in their last two years of study and to have completed a course in Political Theory. Other applicants will be considered for admission to the M.A program in Political Studies if they hold a B.A (Advanced) Wirth a major in Political Studies, and have a course selection pattern and performance in those courses that is comparable in quality to that of a B.A (Honours) student. Applicants possessing a B.A (Honours) degree in another discipline with an overall grade point average of 3.5 (B+) will also be considered for direct entry into the program primarily on the basis of their completion of Political Studies or directly related courses

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

The Pre-Master's year is designed for students who do not meet the requirements for admission to the Master's program. To be eligible for Pre-Master's study, applicants will normally possess a general Bachelor's degree with a major in Political Studies (30 credit hours including one course in Political Theory), with a minimum cumulative grade point average of 3.0 (B). Applicants possessing a general B.A. in another discipline with a cumulative grade point average of 3.5 (B+) will also be considered for direct entry into the Pre-Master's program, primarily on the basis of their completion of Political Studies or directly related courses.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Political Studies M.A. program of study (https://umanitoba.ca/explore/programs-of-study/political-studies-ma/) page.

Degree Requirements

The M.A. program consists of two independent streams of study: the major research paper stream, and the thesis stream. In consultation with the Graduate Chair/their advisor, students are expected to select either the major research paper or thesis stream by December of their first year of study. The main purpose of the major research paper stream is to enhance the student's understanding of the discipline of Political Science and their chosen sub-fields. The thesis-based stream is to provide students with a deep understanding of Political Science and to develop their research skills to a level that allows them to explore a chosen topic in depth.

The thesis stream of the M.A in Political Studies consists of course work, a thesis, and an oral examination. Students in the thesis stream must complete a minimum of 15 credit hours, 12 credit hours must be at the 7000 level in Political Studies. In some cases, and with written permission from the Department's Graduate Committee, students may

substitute three (3) credit hours of coursework at the 4000/7000 level in a related discipline. Three (3) credit hours includes Research Methods, and three (3) credit hours includes The Study of Politics. Thesis is normally between 20,000 and 25,000 (80,100 pages) but no more than 30,000 words (120 pages). A waiver of the length requirement may be granted by the Graduate Committee, up request and with support from the Advisor.

The major research paper stream of the M.A in Political Studies consists of course work and a research paper. Students in the major research paper stream must complete a minimum of 18 credit hours at the 7000 level in Political Studies. In some cases, and with written permission from the Department's Graduate Committee, students may substitute six (6) credit hours of course work at the 7000 level in a related discipline or may be permitted to take six (6) credit hours at the 4000 level in Political Studies. Includes 3 credits of Research Methods, and 3 credits in The Study of Politics. The Major Research Paper (MRP) normally is 6,000-8,000 words in length (25-30 pages; max 40). Final paper is assessed by the MRP advisor and a second reader. Must achieve a minimum grade of B to pass.

Expected Time to Graduate: 2 years (Thesis-based) 1 year (Course-based).

Progression Chart

Thesis STREAM

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
POLS 7100	The Study of Politics	3
POLS 7300	Directed Readings in Public Administration	3
POLS 7XXX	Courses designated POLS 7000 or above	9
	Hours	**15**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**15**

Notes:

- Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.
- The M.A. thesis proposal must include a literature review, description of the proposed work, and a schedule for completion. The proposal should normally be completed within 10 months following the start of the program and must be approved by the student's advisor.

Major Research Paper STREAM

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
POLS 7100	The Study of Politics	3
POLS 7300	Directed Readings in Public Administration	3
POLS 7XXX	Courses designated POLS 7000 or above	12
	Hours	**18**
Year 2		
POLS 7110	Major Research Paper	0
	Hours	**0**
	Total Hours	**18**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to meet with the Graduate Chair/Designate to have their re/registration pre-approved. Except under extenuating circumstances, these re/registration meetings will normally be held by July 1 of the academic year.

Students may need to register for POLS 6010 Manitoba Legislative Internship.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Psychology, M.A.

Psychology
Head: Melanie Soderstrom
Associate Head (Graduate): Melanie Glenwright
Campus Address/General Office: P514 Duff Roblin Building
Telephone: 204-474-6377
Email Address: Psychology.GraduateOffice@umanitoba.ca
Website: umanitoba.ca/arts/psychology (https://umanitoba.ca/arts/psychology/)
Academic Staff: Please refer to the Psychology website (https://umanitoba.ca/arts/psychology/faculty-and-staff/) for staff information.

Psychology Program Information

Graduate study in the Department of Psychology is offered at both the Master of Arts and the Doctor of Philosophy levels. The M.A. program is designed to provide a broad foundation in the scientific approach to psychology, as well as specialized skills. The Ph.D. program provides a higher degree of specialization coupled with more intensive training in research and application.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Psychology M.A. Admission Requirements

Applications for graduate study are accepted from students holding either a B.A. (Honours) or B.Sc. (Honours) degree from the University of Manitoba or its equivalent from another university. Students holding a four-year B.A. (Advanced Major) or B.Sc. (Major) from the University of Manitoba, or another Canadian university, are normally accepted into the pre-M.A. program. However, program areas can recommend applicants for admission to the M.A. program, notwithstanding, if they hold a four-year B.A. or B.Sc. degree from a program at any university recognized by the Faculty of Graduate Studies, that does not provide an opportunity to complete an honours degree and/or an honours thesis.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Psychology M.A. program of study (https://umanitoba.ca/explore/programs-of-study/psychology-ma/) page.

Degree Requirements

Please consult the Supplemental Regulations under the Regulations tab for program requirements.

Expected Time to Graduate: 2 years

Progression Charts

- Students must complete PSYC 7780 no later than their 4th term of registration in MA level

Basic Course Requirements

Course	Title	Hours
Year 1		
Select one half-course from the defined major		3
PSYC 7200	Quantitative Methods in Psychology 1	3
PSYC 7210	Quantitative Methods in Psychology 2	3
PSYC 7780	M.A. Thesis Proposal Development [1]	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**9**
Year 2		
Select one half-course from the defined major		3
Select one ancillary half-course (from the Psychology graduate curriculum, or 3000 level or above from another department)		3
GRAD 7000	Master's Thesis	0
Additional course requirements (if any)		
	Hours	**6**
	Total Hours	**15**

[1] Students must complete PSYC 7780 no later than 4th term of registration in MA level.

Clinical Course Requirements

Course	Title	Hours
Year 1		
PSYC 7200	Quantitative Methods in Psychology 1	3
PSYC 7210	Quantitative Methods in Psychology 2	3
PSYC 7140	Clinical Research Design	3
PSYC 7260	Case Conceptualization and Communication 1	0
PSYC 7320	Foundations of Evidence-Based Treatment	3
PSYC 7520	Ethics and Professional Issues in Clinical Psychology	3
PSYC 7550 or PSYC 7022	Intellectual and Cognitive Assessment or Psycho-educational Assessment and Measurement 1	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PSYC 7780	M.A. Thesis Proposal Development [1]	0
	Hours	**18**
Year 2		
PSYC 7080	Child/Youth Psychopathology	3
PSYC 7270	Case Conceptualization and Communication 2	0
PSYC 7280 or PSYC 8230	History and Systems of Psychology or Clinical Neuropsychology	3
PSYC 7290	Psychopathology and Diagnosis	3
PSYC 7910	Clerkship-Practicum in Clinical Psychology	0
PSYC 7920	Clerkship-Practicum in Clinical Psychology	0
GRAD 7000	Master's Thesis	0
	Hours	**9**
	Total Hours	**27**

[1] Students must complete PSYC 7780 no later than 4th term of registration in MA level.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all students (new and returning) must meet with their advisor to determine their program of study. Courses must be listed on a Departmental Program Registration Form. The form must be signed by the advisor and the graduate programs coordinator. Only those courses that have been approved by the graduate office will be credited to a student's program.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Psychology, Ph.D.

Psychology
Head: Melanie Soderstrom
Associate Head (Graduate): Melanie Glenwright
Campus Address/General Office: P514 Duff Roblin Building
Telephone: 204-474-6377
Email Address: Psychology.GraduateOffice@umanitoba.ca
Website: umanitoba.ca/arts/psychology (https://umanitoba.ca/arts/psychology/)
Academic Staff: Please refer to the Psychology website (https://umanitoba.ca/arts/psychology/faculty-and-staff/) for staff information.

Psychology Program Information

Graduate study in the Department of Psychology is offered at both the Master of Arts and the Doctor of Philosophy levels. The M.A. program is designed to provide a broad foundation in the scientific approach to psychology, as well as specialized skills. The Ph.D. program provides a higher degree of specialization coupled with more intensive training in research and application.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Psychology Ph.D. Admission Requirements

Students may be admitted to the doctoral program if they have the equivalent of an M.A. degree in Psychology from the University of Manitoba.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Psychology Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/psychology-phd/) page.

Degree Requirements

Please consult the Supplementary Regulations under the Regulations tab for program requirements. Students in the clinical training program have a more extensive program of study, including clinical practice at the Psychological Service Centre, and must complete an internship year at an accredited training site.

Expected Time to Graduate: Non-Clinical Programs - 3 years; Clinical Program - 4 years.

Progression Chart

Basic Course Requirements

Course	Title	Hours
Year 1		
Select one half-course from the defined major		3
Select one ancillary half-course (from the Psychology graduate curriculum, or 4000 level or above from another department)		3
Select one half-course in Research Design or Quantitative Methods		3

Thesis Proposal Development		0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (unless completed previously)	0
	Hours	**9**
Years 2-4		
Select one half-course from the defined major		3
GRAD 8010	Doctoral Candidacy Examination	0
PSYC 7790	Ph.D. Dissertation Proposal Development [1]	0
GRAD 8000	Doctoral Thesis	0
Additional course requirements (if any)		
	Hours	**3**
	Total Hours	**12**

[1] Students must complete PSYC 7790 no later than 8th term of registration in PhD level.

Clinical Course Requirements

Course	Title	Hours
Year 1		
PSYC 7560	Personality and Psychological Assessment	3
PSYC 7082	Intervening with Children and Social Systems	3
PSYC 7930	Clerkship-Practicum in Clinical Psychology	0
PSYC 7940	Clerkship-Practicum in Clinical Psychology	0
PSYC 8110 or PSYC 7130	Program Evaluation and Consultation (with approval) or School Psychology Research Design and Program Evaluation	3
Select one Social Bases of Behaviour Elective (with approval)		3
PSYC 8080	Case Conceptualization and Communication 3	3
PSYC 8430	Cognitive Behaviour Therapy	3
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (unless completed previously)	0
	Hours	**18**
Years 2-4		
PSYC 7790	Ph.D. Dissertation Proposal Development [1]	0
PSYC 8090	Clinical Supervision in Psychology	3
PSYC 7950	Clerkship-Practicum in Clinical Psychology	0
PSYC 7952	Clerkship-Practicum in Clinical Psychology	0
Select one of the following (PhD Ancillary):		3
PSYC 7280	History and Systems of Psychology	
PSYC 8230	Clinical Neuropsychology	
Or a Biological Bases of Behaviour alternative with approval		
Select one Cognitive-Affective Bases Elective (with approval)		3
PSYC 7954	Clerkship-Practicum in Clinical Psychology	0
PSYC 7956	Clerkship-Practicum in Clinical Psychology	0
GRAD 8000	Doctoral Thesis (Year 6)	0
PSYC 7980	Internship in Clinical Psychology (Year 6)	0
	Hours	**9**
	Total Hours	**27**

[1] Students must complete PSYC 7790 no later than 8th term of registration in PhD level (3rd year of study).

Notes:

- Students should register for GRAD 8010 during the summer of their 1st year of study (see http://umanitoba.ca/faculties/arts/departments/psychology/media/New-Candidacy-Regulations.pdf)
- Students should schedule their PhD proposal for the summer of their 2nd year of study
- Students should commence data collection for their PhD their during the summer of their 3rd year of study (strongly recommended)

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all students (new and returning) must meet with their advisor to determine their program of study. Courses must be listed on a Departmental Program Registration Form. The form must be signed by the advisor and the graduate programs coordinator. Only those courses that have been approved by the graduate office will be credited to a student's program.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-

requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Public Administration, M.P.A.

Political Studies
Acting Head: Dr. Jason Leboe-McGowan
Chair: Dr. Susan Prentice
Associate Chair & Coop Placement: Malcolm Bird
Campus Address/General Office: 532 Fletcher Argue
Telephone: 204-474-9733
Email Address: political.studies@umanitoba.ca (political_studies@umanitoba.ca)
Website: umanitoba.ca/arts/political-studies (https://umanitoba.ca/arts/political-studies/)
Academic Staff: Please refer to the Political Studies website (https://umanitoba.ca/arts/political-studies/faculty-staff/) for staff information.

Public Administration Program Information

Students admitted prior to Fall 2017 should refer to the Academic Calendar for the year they began their program. See umanitoba.ca/student/records/academiccalendar_archive.html (http://umanitoba.ca/student/records/academiccalendar_archive.html) for Calendar archives.

This Master of Public Administration program is offered jointly by the Department of Political Studies (http://umanitoba.ca/faculties/arts/departments/political_studies/master_pa/) at the University of Manitoba and the Department of Political Science at the University of Winnipeg. Unless otherwise specified by particular agreements attached to its own creation, it is governed by the general procedures and regulations devised by the two universities for joint master's programs.

Joint Master's Program

The University of Manitoba and The University of Winnipeg together offer the Joint Master's program, with courses and thesis direction (if applicable) offered at both institutions. Students of a JMP are admitted by the Faculty of Graduate Studies at the University of Manitoba. Graduates of Joint Master's programs receive a joint-institution parchment. Students in the JMP may elect to attend the convocation of either of the two participating universities. The programs are governed by the Joint Discipline Committee (JDC) at the department/unit level, consisting of faculty members of both institutions.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.P.A. Admission Requirements

Applicants for admission to the program must normally be graduates of four-year undergraduate degree programs (or equivalent) from:

- Canadian institutions empowered by law to grant degrees; or
- Colleges and universities outside Canada, which are officially recognized by the Faculty of Graduate Studies.

It is preferred, but not required, that applicants have some formal course background in public administration, political science or economics. Students from other disciplines are also encouraged to apply.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.P.A. program of study (https://umanitoba.ca/explore/programs-of-study/public-administration-mpa/) page.

Degree Requirements

All students must complete 36 credit hours of study, including 24 credit hours of required courses and 12 credit hours of optional courses, all of which would be at the 7000-level (normally), and 2 mandatory co-op placements (POLS 7800 & POLS 7810). Students with demonstrated professional-work experience with a public sector organization in the area of health or public administration, may request a waiver of the requirement for two co-op placements.

There is no thesis option or comprehensive examination. Students are required, however, to complete a major research paper as part of the Capstone Seminar.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
POLS 7130/9040	Theories and Issues in Public Administration	3
POLS 7132/9250	Public Policy Process and Issues	3
POLS 7136/9260	Governance and Administration	3
POLS 7134/9640	Qualitative Methods and Communications for the Public Sector	3
POLS 7140/9420	Principles of Public Finance for Policy Analysis	3
POLS 7XXX	Option	3
POLS 7800	MPA Co-operative Education Term 1	0
	Hours	**18**
Year 2		
POLS 7138/9630	Quantitative Methods for Policy Analysis	3
POLS 7990/9610	MPA Capstone Seminar	3
POLS 7980/9620	Professional Development	3
POLS 7XXX	Option	3
POLS 7XXX	Option	3

POLS 7XXX	Option	3
POLS 7810	MPA Co-operative Education Term 2	0
	Hours	**18**
	Total Hours	**36**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students will meet with the Chair or designate. During their meeting courses will be discussed and approved. Students will complete the Departmental Graduate Student Registration Form. The form will be submitted to the Department Admin, and the registration will be completed on the students behalf. Registration revisions (addition and /or deletion of courses) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Religion, M.A.

Religion
Head: Kenneth MacKendrick
Grad Chair: Elizabeth Alexandrin (UM) & Carlos Colorado (UW)
Campus Address/General Office: 326 Fletcher Argue
Telephone: 204-474-9151
Fax: 204-474-7601
Email Address: Religion@umanitoba.ca
Website: umanitoba.ca/arts/religion (https://umanitoba.ca/arts/religion/)

Religion Program Information

The Department of Religion offers a Master of Arts and a Doctor of Philosophy in Religion. The M.A. program is a Joint Program in co-operation with the Department of Religion and Culture at the University of Winnipeg.

Joint Master's Program

The University of Manitoba and The University of Winnipeg together offer the Joint Master's program, with courses and thesis direction (if applicable) offered at both institutions. Students of a JMP are admitted by the Faculty of Graduate Studies at the University of Manitoba. Graduates of Joint Master's programs receive a joint-institution parchment. Students in the JMP may elect to attend the convocation of either of the two participating universities. The programs are governed by the Joint Discipline Committee (JDC) at the department/unit level, consisting of faculty members of both institutions.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Religion M.A. Admission Requirements

In addition to the minimum admission requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 79) of this calendar, a four-year B.A. (Honours) degree in Religion is the normal preparation for the M.A. program. Applicants without sufficient background for direct admission to the Joint Master's Program may be recommended to the Pre-Master's Program.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Religion M.A. program of study (https://umanitoba.ca/explore/programs-of-study/religion-ma/) page.

Degree Requirements

Two types of programs are available:

Thesis Route

1. Student must complete a minimum of 12 credit hours of coursework in Religion at the 7000-level, offered through the U of M or the U of W, or a combination thereof.
2. Students in the JMP program must demonstrate competence in a second language relevant to their program of study.
3. Oral Examination of thesis.

Coursework-based/Comprehensive Examination Route

1. Students who choose this route must complete a minimum of 24 credit hours of coursework offered through the U of M or the U of W, or a combination thereof. Of the required 24 credit hours, at least 18 credit hours must be in Religion at the 7000-level. Up to 6 credit hours at the 7000-level may be taken in another Department.
2. Students in the JMP program must demonstrate competence in a second language relevant to their program of study.
3. Students are required to present and defend an original paper.

Language Requirement: Students must demonstrate competence in a second language that is relevant to their program of study. The language requirement is satisfied by the successful completion of a language translation exam or the successful completion of 6 credit hours of coursework in the selected language that is beyond the 1000-level.

Expected Time to Graduate: 2 years

Progression Chart

Thesis Route

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
RLGN 7XXX	Courses designated RLGN 7000 level or higher	12
Language Translation Exam		
Submission of Thesis Proposal		
	Hours	**12**
Year 2		
GRAD 7020	Master's Re-registration	0
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**12**

Coursework-based/Comprehensive Route

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
RLGN 7XXX	Courses designated RLGN 7000 level or above	9
Select one course designated 7000 or above		3
	Hours	**12**
Year 2		
GRAD 7020	Master's Re-registration	0
RLGN 7XXX	Courses designated RLGN 7000 level or above	9
Select one ourse designated 7000 or above		3
	Hours	**12**
	Total Hours	**24**

Certain programs of study within religion may require courses outside the Department of Religion.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

To obtain written approval for courses before registration, all students in the Religion Joint Master's Program must meet either the chair of the Joint Discipline Committee, Religion, or with the department head or designate. All Ph.D. students must meet first with the head, Department of Religion. Course additions and withdrawals must be approved in the same way.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Religion, Ph.D.

Religion
Head: Kenneth MacKendrick
Grad Chair: Elizabeth Alexandrin
Campus Address/General Office: 326 Fletcher Argue
Telephone: 204-474-9151
Email Address: Religion@umanitoba.ca
Website: umanitoba.ca/arts/religion (https://umanitoba.ca/arts/religion/)

Religion Program Information

The Department of Religion offers a Master of Arts and a Doctor of Philosophy in Religion.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Religion Ph.D. Admission Requirements

The department expects applicants to the Ph.D. graduate program to have a thesis-based M.A. degree in Religion (with a minimum cumulative GPA of 3.5) or its equivalent.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Religion Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/religion-phd/) page.

Degree Requirements

Students must complete at least 18 credit hours of coursework at the 7000 level. A minimum of 12 credit hours at the 7000 level in Religion is required. Students lacking sufficient background in methodology in the study of Religion may be required to complete an additional 6 credit hours in method and theory in the study of Religion as auxiliary courses, in addition to the mandatory 18 credit hours.

Language Requirement: Students must demonstrate competence in the research languages relevant to the proposed doctoral thesis. The language requirement must be satisfied prior to the Candidacy Examinations. Language requirements are normally satisfied by students successfully completing language translation examinations.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
RLGN 7XXX	Courses designated RLGN 7000 or above	12
CRSE 7XXX	Courses designated 7000 or above	6
Language Translation Exam		
	Hours	**18**
Year 2		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Year 3		
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
Year 4		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**18**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All Ph.D. students must meet first with the head, Department of Religion. Course additions and withdrawals must be approved in the same way.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

School Psychology, M.A.

Psychology
Head: Melanie Soderstrom
Associate Head (Graduate): Melanie Glenwright
Campus Address/General Office: P514 Duff Roblin Building
Telephone: 204-474-6377
Email Address: psych_grad_office@umanitoba.ca
Website: umanitoba.ca/psychology/ (https://umanitoba.ca/psychology/)
Academic Staff: Please refer to the Psychology website (http://umanitoba.ca/faculties/arts/departments/psychology/people/) for staff information.

Psychology Program Information

Graduate study in the Department of Psychology is offered at both the Master of Arts and the Doctor of Philosophy levels. The M.A. program is designed to provide a broad foundation in the scientific approach to psychology, as well as specialized skills. The Ph.D. program provides a higher degree of specialization coupled with more intensive training in research and application.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

School Psychology M.A. Admission Requirements

The normal requirement for admission is an Honours B.A. or B.Sc. in Psychology or its equivalent. Students seeking admission with other degrees will usually be required to complete a pre-Master's year to the satisfaction of the department.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the School Psychology M.A. program of study (https://umanitoba.ca/faculties/graduate_studies/admissions/programs/psychology.html) page.

Degree Requirements

Please consult the Supplemental Regulations under the Regulations tab for program requirements.

Expected Time to Graduate: 2 years (Comprehensive exam stream) or 3 years (Thesis stream)

Progression Charts

- Students must complete PSYC 7780 no later than their 4th term of registration in MA level.

SCHOOL PSYCHOLOGY 2 YEAR COMPREHENSIVE EXAM STREAM

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PSYC 7012	Ethics, History and Profession of School Psychology 1	3
EDUA 5012	Legal and Administrative Aspects of Schools for Clinicians	3
PSYC 7022	Psycho-educational Assessment and Measurement 1	3
PSYC 7024	Psycho-educational Assessment and Measurement 2	3
PSYC 7030	Learning and Cognitive Impairment	3
PSYC 7040	Teaching Strategies, Learning Styles, and Academic Remediation	3
PSYC 7050	Junior Practicum in School Psychology	3
PSYC 7070	Social, Emotional, and Personality Assessment of Children/Youth	3
PSYC 7080	Child/Youth Psychopathology	3
EDUA 7712	Working with Family, School and Community Systems	3
	Hours	**30**
Year 2		
PSYC 7060	Senior Practicum in School Psychology	6
PSYC 7090	Behavioural Assessment and Intervention in School Settings	3
PSYC 7120	Consultation and Supervision	3
PSYC 7130	School Psychology Research Design and Program Evaluation	3
PSYC 7820	Interventions I	3
PSYC 7830	Interventions II	3
EDUA 7710	Development in Learning Environments	3
GRAD 7010	Comprehensive Examination	0
	Hours	**24**
	Total Hours	**54**

SCHOOL PSYCHOLOGY 3 YEAR THESIS STREAM

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PSYC 7200	Quantitative Methods in Psychology 1	3
PSYC 7210	Quantitative Methods in Psychology 2	3

PSYC 7030 or PSYC 7080	Learning and Cognitive Impairment or Child/Youth Psychopathology	3
EDUA 7712	Working with Family, School and Community Systems	3
Select two of the following:		6
PSYC 7040	Teaching Strategies, Learning Styles, and Academic Remediation	
PSYC 7070	Social, Emotional, and Personality Assessment of Children/Youth	
PSYC 7120	Consultation and Supervision	
	Hours	**18**
Year 2		
PSYC 7012	Ethics, History and Profession of School Psychology 1	3
EDUA 5012	Legal and Administrative Aspects of Schools for Clinicians	3
PSYC 7022	Psycho-educational Assessment and Measurement 1	3
PSYC 7024	Psycho-educational Assessment and Measurement 2	3
PSYC 7030 or PSYC 7080	Learning and Cognitive Impairment or Child/Youth Psychopathology	3
Select one of the following:		3
PSYC 7040	Teaching Strategies, Learning Styles, and Academic Remediation	
PSYC 7070	Social, Emotional, and Personality Assessment of Children/Youth	
PSYC 7120	Consultation and Supervision	
PSYC 7050	Junior Practicum in School Psychology	3
PSYC 7780	M.A. Thesis Proposal Development [1]	0
	Hours	**21**
Year 3		
PSYC 7060	Senior Practicum in School Psychology	6
PSYC 7090	Behavioural Assessment and Intervention in School Settings	3
PSYC 7820	Interventions I	3
PSYC 7830	Interventions II	3
PSYC 7130	School Psychology Research Design and Program Evaluation	3
Select one of the following (if not completed in 2nd year):		3
PSYC 7040	Teaching Strategies, Learning Styles, and Academic Remediation	
PSYC 7070	Social, Emotional, and Personality Assessment of Children/Youth	
PSYC 7120	Consultation and Supervision	
EDUA 7710	Development in Learning Environments	3
GRAD 7000	Master's Thesis	0
	Hours	**24**
	Total Hours	**63**

[1] Students must complete PSYC 7780 no later than 4th term of registration in MA level.

Note: EDUA 5012 may be waived by the program coordinator for students who do not wish practice in Manitoba schools. A student can request this waiver by emailing the School Psychology Area Group Chair, requesting that the waiver be noted in the student's file. The School Psychology Area Group Chair will forward the email to the Graduate Program Coordinator for recording purposes. This email request needs to be completed prior to completion of the program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all students (new and returning) must meet with their advisor to determine their program of study. Courses must be listed on a Departmental Program Registration Form. The form must be signed by the advisor and the graduate programs coordinator. Only those courses that have been approved by the graduate office will be credited to a student's program.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Slavic Studies, M.A.

German and Slavic Studies
Head: Alexandra Heberger
Campus Address/General Office: 328 Fletcher Argue Building
Telephone: 204-474-9151
Email Address: german_slavic@umanitoba.ca
Website: umanitoba.ca/arts/departments/german_and_slavic (http://www.umanitoba.ca/arts/departments/german_and_slavic/)
Academic Staff: Please refer to the German and Slavic Studies website (https://umanitoba.ca/faculties/arts/departments/german_and_slavic/staff/) for Faculty information.

German and Slavic Studies Program Information

The department offers programs of study leading to the Master of Arts degree in the fields of German (Culture, Literature, Second Language Acquisition) and Slavic Studies (Russian and/or Ukrainian Culture, Literature). Programs must be arranged in consultation with the Graduate Chair of the department.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Slavic Studies M.A. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies. Students with other degrees or backgrounds may be eligible for admission to a Pre-Master's program to the satisfaction of the department.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

The Pre-Master's year will normally consist of 24 credit hours of coursework, of which at least 12 are in the major discipline. At most, one grade of C+ in a course of six credit hours, or two grades of C+ in courses of three credit hours, will be permitted.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Slavic Studies M.A. program of study (https://umanitoba.ca/faculties/graduate_studies/admissions/programs/german_slavic.html) page.

Degree Requirements

Students fulfill the requirements for the Master's degree by doing a combination of coursework and thesis. A minimum of 15 credit hours of coursework is required, including SLAV 7200 and 6 other credit hours at the 7000 level in the student's major discipline. The remaining 6 credit hours, designated as ancillary credit, may be taken at the 7000, 4000, 3000 (or in exceptional circumstances the 2000) level and may be in courses in the student's major discipline, or in another program or department, at the discretion of the chair of the Graduate Studies Committee. A thesis prospectus must be submitted to the candidate's M.A. advisor a minimum of two months before the thesis is submitted to the M.A. Committee.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SLAV 7200	Literary and Cultural Theory	3
COURSE XXXX	Course related to student's major discipline	6
COURSE XXXX	Ancillary Credit [1]	6
	Hours	**15**
Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**15**

1. The remaining 6 credit hours, designated as ancillary credit, may be taken at the 7000, 4000, 3000 (or in exceptional circumstances the 2000) level and may be in courses in the student's major discipline, or in another program or department, at the discretion of the Chair of Graduate Studies Committee.
2. Thesis proposal for submission at the end of the first year of study and, at minimum, two months before the thesis is submitted to the Thesis Examining Committee.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration in German or Slavic Studies, students must consult with the graduate chair or the department head.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Sociology, M.A.

Sociology and Criminology
Head: Andrew Woolford
Campus Address/General Office: 320 Isbister Building
Telephone: 204-474-9260
Fax: 204-261-1216
Website: umanitoba.ca/arts/sociology-criminology (https://umanitoba.ca/arts/sociology-criminology/)
Academic Staff: Please refer to Sociology and Criminology Faculty (https://umanitoba.ca/arts/sociology-criminology/faculty-staff/) for staff information.

Sociology Program Information

The Department of Sociology and Criminology offers programs that lead to the Master of Arts and Doctor of Philosophy degrees. Both programs provide training in the core areas of the discipline (theory and research methods) and offer a wide range of areas of specialization and theoretical approaches.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Sociology M.A. Admission Information

Students who have completed a 4-year Honours degree in Sociology or equivalent, or a closely related cognate field that includes substantial sociological content and a strong foundation in sociological research methods and theory may enter directly into the Master of Arts program. Students with a general 3-year B.A. in Sociology may be eligible for the Pre-Master's year.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Sociology M.A. program of study (https://umanitoba.ca/explore/programs-of-study/sociology-ma/) page.

Degree Requirements

The Master of Arts program in Sociology consists of 18 credit hours of coursework (including 3 credit hours in Research Methods and 3 credit hours in Sociological theory). Students must also complete and successfully defend a thesis.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following Methods courses: [1]		3
SOC 7240	Seminar in Selected Topics in Research and Methods	
SOC 7390	Survey Research Methods	
SOC 7400	Advanced Quantitative Research Methods	
SOC 7420	Qualitative Research Methods for Sociological Inquiry	
SOC 7470	Evaluating Social Programs	
Select one of the following Theory courses:		3
SOC 7190	Seminar in Selected Topics in Sociological Theory	
SOC 7320	Seminar in Political Sociology	
SOC 7430	Seminar in Classical Sociological Theory	
SOC 7440	Seminar in Contemporary Sociological Theory	
SOC 7480	Social Inequality	
SOC 7280	Seminar in Theoretical Criminology	
Select courses designated SOC 7000		12
	Hours	**18**

Year 2

GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

[1] Students may take courses outside the department with permission from the Graduate Chair. (See Supplementary Regulations for details.) Auxiliary courses may be taken with permission from the student's advisor and the Graduate Chair. Reading courses are permitted only under exceptional circumstances, and require permission from the Graduate Chair and Department Head.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning Pre-Masters, M.A., and Ph.D. students must meet with the Chair of Graduate Studies in Sociology to discuss their program of study (usually in late August). The Graduate Program Assistant will then register the student. All course additions and withdrawals must be arranged in a similar fashion.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Sociology, Ph.D.

Sociology and Criminology
Head: Andrew Woolford
Campus Address/General Office: 320 Isbister Building
Telephone: 204-474-9260
Fax: 204-261-1216
Website: umanitoba.ca/arts/sociology-criminology (https://umanitoba.ca/arts/sociology-criminology/)
Academic Staff: Please refer to Sociology and Criminology Faculty (https://umanitoba.ca/arts/sociology-criminology/faculty-staff/)for staff information.

Sociology Program Information

The Department of Sociology and Criminology offers programs that lead to the Master of Arts and Doctor of Philosophy degrees. Both programs provide training in the core areas of the discipline (theory and research methods) and offer a wide range of areas of specialization and theoretical approaches.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Sociology Ph.D. Admission Requirements

Students who wish to enter the Doctor of Philosophy program must have completed a Master's degree in Sociology or a closely related cognate field that includes substantial sociological content and a strong foundation in sociological research methods and theory.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Sociology Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/sociology-phd/) page.

Degree Requirements

Students must complete:

- A minimum of 18 credit hours of coursework (including 3 credit hours in Theory and 6 credit hours in Research Methods);
- A passing grade in two comprehensive examinations in two different subject areas, chosen from the following: Sociological Theory; Sociological Methods; Criminology and Social Justice; Culture and Social Relations; Population Health and Wellness; Power, Privilege, and Resistance, Global Sociology; Social Policy and Practice.
- Successful defense of a dissertation proposal; and
- Successful defense of the completed dissertation.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select two of the following Methods courses: [1]		6
SOC 7240	Seminar in Selected Topics in Research and Methods	
SOC 7390	Survey Research Methods	
SOC 7400	Advanced Quantitative Research Methods	
SOC 7420	Qualitative Research Methods for Sociological Inquiry	
SOC 7470	Evaluating Social Programs	
Select one of the following Theory courses:		3
SOC 7190	Seminar in Selected Topics in Sociological Theory	
SOC 7280	Seminar in Theoretical Criminology	
SOC 7320	Seminar in Political Sociology	
SOC 7430	Seminar in Classical Sociological Theory	
SOC 7440	Seminar in Contemporary Sociological Theory	
SOC 7480	Social Inequality	
Select three courses designated SOC 7000 [1]		9
	Hours	**18**
Year 2		
GRAD 8010	Doctoral Candidacy Examination [2]	0
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**18**

1 Students may take courses outside the department with permission from the Graduate Chair. (See Supplementary Regulations for details.) Auxiliary courses may be taken with permission from the student's advisor and the Graduate Chair. Reading courses are permitted only under exceptional circumstances, and require permission from the Graduate Chair and Department Head.

2 The Doctoral Examination is comprised of 2 Comprehensive Exams each of which normally take 4-6 months of preparation.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning Pre-Masters, M.A., and Ph.D. students must meet with the Chair of Graduate Studies in Sociology to discuss their program of study (usually in late August). The Graduate Program Assistant will then register the student. All course additions and withdrawals must be arranged in a similar fashion.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Faculty of Education

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Curriculum Teaching and Learning, M.Ed. (p. 219)	2-3	18-30	
Education, Ph.D. (p. 226)	4	24	

Educational Administration, Foundations and Psychology, M.Ed. (p. 228)	2-5	18-30

Curriculum Teaching and Learning, M.Ed.

Curriculum, Teaching and Learning
Head/Graduate Chair: Lilian Pozzer
Campus Address/General Office: 227B Education Building
Telephone: 204-474-9004
Fax: 204-474-7551
Email Address: GradPrograms.Education@umanitoba.ca
Website: umanitoba.ca/education/ (https://www.umanitoba.ca/education/)
Academic Staff: Please see the Education website (https://umanitoba.ca/education/faculty-staff/) for academic staff listing.

Curriculum, Teaching and Learning Program Information

The Department of Curriculum, Teaching and Learning offers the Master of Education program with concentrations in: ACE | Arts, Community and Education; Critical Perspectives in Curriculum, Teaching and Pedagogy; Indigenous (First Nations/Métis/Inuit) Perspectives in Curriculum, Teaching and Learning; Language and Literacy; Second Language Education; Studies in Contemplative, Holistic, and Integrative Education; and Studies in Mathematics Education and Science Education.

Please note that earning a Master of Education degree does not certify one to teach in the province of Manitoba.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Curriculum, Teaching and Learning Admission Requirements

Applicants must possess:

- For the concentrations *Critical Perspectives in Curriculum, Teaching and Pedagogy; Indigenous (First Nations/Métis/Inuit) Perspectives in Curriculum, Teaching and Learning; and Language and Literacy:*
  a four-year Bachelor of Education degree, or a two-year After-Degree Bachelor of Education, or a three-year undergraduate degree which includes teacher training, plus a Post-Baccalaureate Diploma in Education (PBDE) with a minimum of at least 18 credit hours at the 5000 level.
  For the concentrations *ACE | Arts, Community and Education; Second Language Education; Studies in Contemplative, Holistic, and Integrative Education; and Studies in Mathematics Education and Science Education:* an acceptable four-year equivalent undergraduate degree from an academic institution recognized by the Faculty of Graduate Studies, or a three-year undergraduate degree, plus a PBDE which includes at least 18 credit hours at the 5000 level.
- A grade point average of 3.0 or better in the last 60 credit hours of university coursework.
- Normally two years of relevant work experience.
- Appropriate academic and/or professional background for the program area and concentration.
- Applicants may be required to take additional courses within their programs to enhance relevant professional and/or academic experience.

Individuals who graduate from the Certificate in Adult and Continuing Education (CACE) from the University of Manitoba must complete the following courses:

Course	Title	Hours
EDUA 1560	Adult Learning and Development	3
EDUA 1570	Foundations of Adult Education	3
EDUA 1580	Program Planning in Adult Education	3
EDUA 1590	Facilitating Adult Education	3
An additional 100 hours of elective credit through courses, seminars, and workshops		100

The Faculty of Graduate Studies recognizes a complete CACE program as 15 credit hours towards the admission requirements for the M.Ed.; that is, giving 12 credit hours for the four core courses completed with a grade of 'B' or better and 3 credit hours (non assessable) for the 100 hours of elective study.

Individuals with a three-year undergraduate degree and the four CACE courses listed above must complete an additional 12 credit hours of senior level courses (i.e., 5000 level PBDE courses, 1000 or 2000 level B.Ed. courses, or courses at the 3000 level or above in other faculties) to have the 24 credit hours that are the minimal requirements for satisfying the "honours degree or equivalent" admission requirement. Those with the completed CACE would require an additional 9 credit hours of senior level courses.

Admission to the M.Ed. program is competitive. A number of factors are taken into account in arriving at an admission decision:

1. the capacity of the department to provide the program of study requested by the applicant;
2. the applicant's previous academic background and achievement;
3. the referees' assessment of the applicant;
4. the capacity of the department to provide the applicant with an advisor in the program area; and
5. the applicant's Statement in Support of their application, including relevant professional experience.

Transfer of Credit

The granting of advanced credit is subject to the regulations of the Faculty of Graduate Studies and subject to approval of the program advisor and department head.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Curriculum,

Teaching and Learning M.Ed. program of study (https://umanitoba.ca/explore/programs-of-study/curriculum-teaching-and-learning-med/) page.

Please note that International applications will be reviewed with the Canadian applications in February and March. All candidates who have applied by the January deadline will be notified of the decision regarding their admission by early April.

Degree Requirements

The M.Ed. in Curriculum, Teaching and Learning has a thesis-based route and a course-based route with an oral defense. The M.Ed. course-based route at the University of Manitoba is typically a terminal degree. That is, it is insufficient, in number and of itself, as evidence of research capacity for admission into the Ph.D. in Education program at the University of Manitoba.

The following program requirements apply to all concentrations in the Department of Curriculum, Teaching and Learning. Specific concentration requirements are listed under each concentration below.

Not all courses are offered every year. Although many courses are offered yearly, most courses are offered in the evening and those wishing to study full-time should consult with the department head.

Expected Time to Graduate: full-time: 2 - 3 years; part-time: 4 - 5 years.

Program by Coursework and Thesis

A minimum of 18 credit hours of coursework. At least 12 credit hours must be at the 7000 level or equivalent. The remaining 6 credit hours may be at the 5000 level or above in the Faculty of Education, and/or at the 3000 level or above in other faculties.

EDUA 7830 or its equivalent, is a requirement of all M.Ed. programs in the Faculty of Education. In addition, thesis students must take 3 credit hours of research methods at the 7000 level in Education. In special circumstances research courses at the 3000 level or above in other faculties may be approved as an appropriate alternative to this requirement.

Program by Coursework and Comprehensive Option (either Examination or Project) (Course-based)

A minimum of 30 credit hours of coursework. At least 18 credit hours must be at the 7000 level. The remaining 12 credit hours may be at the 5000 level or above in the Faculty of Education, and/or at the 3000 level or above in other faculties.

EDUA 7830 or its equivalent, is a requirement of all M.Ed. programs in the Faculty of Education.

In addition, all students must complete 9 credit hours of core courses and 18 credit hours of concentration.

Course-based route students have the option of including a capstone course (EDUB 7540) as part of their 30 credit hours of required coursework. Normally, the capstone course is taken by students as preparation for the culminating activity. Students taking this course can expect to complete significant work towards fulfilling the comprehensive examination requirement.

ACE # Arts, Community and Education Concentration

The Master of Education in Arts, Community, and Education follows a social and environmental justice agenda, where students will explore contemporary theories and practices in arts education, such as critical and aesthetic philosophies, arts-based research, community arts and the role of cultural institutions in shaping society. Students will consider art education as a social, cultural and historical process as individual and community transformation, whether the student chooses to work in formal or informal art education settings.

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - 6 credit hours:	6
EDUB 7000	Contemporary Perspectives and Practices in Arts Education	
EDUB 7030	The Arts in Education	
EDUA/B XXXX	Concentration Courses [1]	6
EDUA 7830	Engaging with Research in Education [2]	3
EDUA/B XXXX	Research Methods Course [3]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

1. A total of 6 credit hours of coursework at the 7000 level deemed to be relevant to the concentration as determined and approved by the advisor and the department head.
2. EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.
3. A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - 6 credit hours:	6
EDUB 7000	Contemporary Perspectives and Practices in Arts Education	
EDUB 7030	The Arts in Education	
EDUA/B XXXX	Concentration Courses [1]	21
EDUA 7830	Engaging with Research in Education [2]	3
	Hours	**30**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**30**

1. A total of 21 credit hours of coursework at the 5000 or 7000 level deemed to be relevant to the concentration as approved by the advisor and the department head.
2. EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

Critical Perspectives in Curriculum, Teaching and Pedagogy Concentration

Critical Perspectives in Curriculum, Teaching and Pedagogy focuses on these core questions: What is the purpose of education? What do we mean by curriculum, teaching and pedagogy and who decides? Moreover, we consider how ideological and political discourses influence our understandings of curriculum, teaching and pedagogy. Understandings of curriculum expand beyond provincial curriculum documents and instructional resources, to include the ways in which curriculum is imagined, intellectualized, and enacted. This concentration will explore scholarship and research in curriculum theory, curriculum and pedagogical discourses, teaching and pedagogy, teacher identity, teacher education, and educational leadership. While grounded in curriculum theory, students can explore specific disciplines (e.g. social studies) and contexts (e.g. teachers, administrators, and specialists).

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - 6 credit hours:	6
EDUB 7542	Contemporary Approaches to Curriculum Theorizing	
EDUB 7550	Curriculum: Historical Perspectives and Contemporary Implications	
EDUA/B XXXX	Concentration Courses [1]	6
EDUA/B XXXX	Elective Courses [2]	
EDUA 7830	Engaging with Research in Education [3]	3
EDUA/B XXXX	Research Methods Course [4]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

1. A total of 6 credit hours of coursework at the 7000 level deemed to be relevant to the concentration as determined and approved by the advisor and the department head.
2. In addition, up to 6 more credit hours of coursework may be selected from any Faculty of Education courses at the 5000 or 7000 level.
3. EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.
4. A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - 6 credit hours:	6
EDUB 7542	Contemporary Approaches to Curriculum Theorizing	
EDUB 7550	Curriculum: Historical Perspectives and Contemporary Implications	
EDUA/B XXXX	Concentration Courses [1]	6
EDUA/B XXXX	Elective Courses [2]	15
EDUA 7830	Engaging with Research in Education [3]	3
	Hours	**30**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**30**

1. At least 6 credit hours of coursework at the 7000 level deemed to be relevant to the concentration as determined and approved by the advisor and the department head.
2. Fifteen (15) credit hours of coursework at the 5000 level or above from the Faculty of Education. Three (3) of these credit hours may be from other faculties at the 5000 level or above.
3. EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

Indigenous (First Nations/Métis/Inuit) Perspectives in Curriculum, Teaching and Learning Concentration

Students in this concentration will study Indigenous (First Nations, Métis, and Inuit) ways of knowing and knowledge across curricular areas/disciplines. This concentration will offer students opportunities to explore Indigenous (First Nations, Métis, and Inuit) education as a field of study and practice, including decolonizing curriculum theory, curricula, and methodologies.

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - 6 credit hours:	6
EDUB 7900	Critical Examination of Reconciliation in and through Education	
EDUB 7930	First Nations, Metis, and Inuit Ways of Knowing in/for Curriculum, Teaching and Learning	
EDUA/B XXXX	Concentration Courses [1]	6
EDUA 7830	Engaging with Research in Education [2]	3
EDUA/B XXXX	Research Methods Course [3]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

1. Six credit hours selected from:
   • EDUB 7910 Seminar in Indigenous (First Nations/Métis/Inuit) Education (3)
   • EDUB 7950 Indigenous Storytelling, Narrative and Storywork as Pedagogy (3)
   • Any 7000-level course offered in the Department of Curriculum, Teaching and Learning deemed to be relevant to the concentration as determined and approved by the advisor and the department head.
2. EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

[3] A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - 9 credit hours:	9
EDUB 7900	Critical Examination of Reconciliation in and through Education	
EDUB 7930	First Nations, Metis, and Inuit Ways of Knowing in/for Curriculum, Teaching and Learning	
Any 7000 level 3 credit-hour course deemed to be relevant to the concentration and approved by both the advisor and the department head.		
EDUA/B XXXX	Concentration Courses [1]	18
EDUA/B XXXX	Research Methods Course [2]	3
	Hours	**30**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**30**

[1] A total of 18 credit hours of elective coursework from:
- EDUB 7910 Seminar in Indigenous (First Nations/Métis/Inuit) Education (3)
- EDUB 7950 Indigenous Storytelling, Narrative and Storywork as Pedagogy (3)
- 6 credit hours of 7000 level courses offered in the Department of Curriculum, Teaching and Learning
- 6 credit hours of 5000 or 7000 level courses offered in the Faculty of Education

[2] EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

Language and Literacy Concentration

The Master of Education in Language and Literacy program is a broad specialty encompassing pre-school to post-secondary levels. The purpose of the program is to develop a theoretical background and promote skills that will enable students to conduct independent research. Language investigation may also include social, political and cultural issues.

Literacy educators are also interested in early language development, reading diagnosis and remediation, and the use of language to learn at all levels and in all content areas. Programs can be designed so that graduates can qualify for certification as Reading Clinicians.

Program Requirements are those listed above. Specific course requirements are as follows:

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Twelve (12) credit hours of concentration courses in Language and Literacy (at the 7000 level) in consultation with the advisor. These courses are normally selected from:	12
EDUB 7060	Seminar and Practicum in Clinical Diagnosis and Remediation	
EDUB 7070	Classical Research in Reading	
EDUB 7090	Seminar in Reading Processes	
EDUB 7100	Language and Literacy Curriculum Inquiry in the Early Years	
EDUB 7110	Research in Language and Literacy Development	
EDUB 7120	Curricular Issues in English Language Arts Education	
EDUB 7130	Becoming Writers: Power, Place and Pedagogy in Teaching Writing	
EDUB 7142	Topics in Curriculum, Teaching, and Learning	
EDUB 7150	Seminar in Reading and Response to Literature	
EDUB 7160	Language Teacher as Researcher	
EDUB 7180	Research in Written Composition	
EDUB 7190	Research in Language for Learning	
EDUB 7290	Curriculum Research in Early Years: Young Children and Social Semiotics	
EDUB 7530	Curriculum Development and Implementation in Language and Literacy	
or other 7000-level courses in Language and Literacy in consultation with the advisor and the department head.		
EDUA 7830	Engaging with Research in Education [1]	3
EDUA/B XXXX	Research Methods Course [2]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

[1] EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

[2] A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Fifteen (15) credit hours of concentration courses in Language and Literacy in consultation with the advisor (12 of which must be at the 7000 level). These courses are normally selected from:	15
EDUB 7060	Seminar and Practicum in Clinical Diagnosis and Remediation	
EDUB 7070	Classical Research in Reading	
EDUB 7090	Seminar in Reading Processes	

EDUB 7100	Language and Literacy Curriculum Inquiry in the Early Years	
EDUB 7110	Research in Language and Literacy Development	
EDUB 7120	Curricular Issues in English Language Arts Education	
EDUB 7130	Becoming Writers: Power, Place and Pedagogy in Teaching Writing	
EDUB 7142	Topics in Curriculum, Teaching, and Learning	
EDUB 7150	Seminar in Reading and Response to Literature	
EDUB 7160	Language Teacher as Researcher	
EDUB 7180	Research in Written Composition	
EDUB 7190	Research in Language for Learning	
EDUB 7290	Curriculum Research in Early Years: Young Children and Social Semiotics	
EDUB 7530	Curriculum Development and Implementation in Language and Literacy	
or other courses in Language and Literacy approved by the advisor and the department head.		
In addition, 12 credit hours of selected electives in consultation with the advisor.		12
EDUA 7830	Engaging with Research in Education [1]	3
	Hours	**30**
Years 2-5		
GRAD 7010	Comprehensive Examination	0
	Hours	**0**
	Total Hours	**30**

[1] EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

Second Language Education Concentration

The Master of Education in Second Language Education (SLE) concentration addresses research, language learning, and pedagogical issues in teaching English as a second language and teaching English as a foreign language, in pre-Kindergarten to Grade 12 through adult teaching contexts. The MEd in SLE also offers students the opportunity to explore the theoretical foundations of curriculum in education in a cohort of approximately 30 graduate students. Our students have taught in a wide variety of international, national, and local contexts, and the MEd in SLE program is designed to provide challenging and stimulating frames of reference for SLE practice.

With the support of a program advisor (faculty member), graduate students in SLE will plan and complete a program of coursework in SLE, research methodologies, and curriculum, capped by a thesis or comprehensive examination option. The thesis or comprehensive option is intended to address the unique goals and interests of each graduate student.

Program Requirements are those listed above. Specific course requirements are as follows:

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses	12
EDUB 7210	Seminar in E.S.L. Theory and Practice	
EDUB 7212	Critical Applied Linguistics in a Global Context	
EDUB 7220	Research Issues and Application in TESL (Teaching English as a Second Language)	
EDUB 7580	Social, Cultural, and Political Theories in Second Language Acquisition	
In addition, up to 6 more credit hours of coursework may be selected from any Faculty of Education 5000 or 7000 level courses (except EDUB 5580). Advisors may decide that EDUB 5580 is a necessary component for the programs of students who have minimal second/foreign language teaching experience or for other reasons. This course will be added to a student's program as an auxiliary course above and beyond the minimum 18 credit hours.		
EDUA 7830	Engaging with Research in Education [1]	3
EDUA/B XXXX	Research Methods Course [2]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

[1] EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

[2] A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses	12
EDUB 7210	Seminar in E.S.L. Theory and Practice	
EDUB 7212	Critical Applied Linguistics in a Global Context	
EDUB 7220	Research Issues and Application in TESL (Teaching English as a Second Language)	
EDUB 7580	Social, Cultural, and Political Theories in Second Language Acquisition	
EDUA/B XXXX	Concentration Courses (see below)	15
EDUA 7830	Engaging with Research in Education [1]	3
	Hours	**30**
Years 2-5		
GRAD 7010	Comprehensive Examination	0
	Hours	**0**
	Total Hours	**30**

[1] EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

Concentration Courses

In consultation with the advisor, 15 credit hours of coursework with a minimum of 9 credit hours at the 7000 level from the following course list, or other courses approved by the advisor and the department head (except EDUB 5580). Advisors may decide that EDUB 5580 is a necessary component for the programs of students who have minimal second/foreign language teaching experience or for other reasons. This course will be added to a student's program as an auxiliary course above and beyond the minimum 30 credit hours.

Course	Title	Hours
EDUA 7270	Seminar in Cross-Cultural Education 1	3
EDUA 7280	Seminar in Cross-Cultural Education 2	3
EDUA 7420	Program Planning in Adult Education	3
EDUB 5510	ESL Materials Development and Practicum	3
EDUB 7070	Classical Research in Reading	3
EDUB 7180	Research in Written Composition	3
EDUB 7330	Inquiry in Curriculum and Instruction	3
EDUB 7420	Study of Teaching	3
EDUB 7540	Final Seminar in Curriculum, Teaching and Learning	3
EDUB 7550	Curriculum: Historical Perspectives and Contemporary Implications	3
EDUB 7560	Theory and Practice of Curriculum Design and Development	3

Studies in Contemplative, Holistic, and Integrative Education Concentration

Contemplative, Holistic, and Integrative Education takes its starting point in a view of humans that considers and integrates all aspects of what it means to be human, including but not limited to the physical, emotional, cognitive, social, ecological, ethical, creative, spiritual, and contemplative aspects. Contemplative, Holistic, and Integrative Education is about educating for a flourishing life. To this end, first, contemplative, Holistic, and Integrative Education draws on the wisdoms of different cultural traditions, multidisciplinary perspectives, and integrative practices from different times and places to educate for living in current times; and, second, Contemplative, Holistic, and Integrative Education integrates studies of the whole person, curriculum, teaching, and learning by collaboratively exploring holistic, experiential, and transformative educational approaches for a flourishing life in a flourishing society.

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - 12 credit hours selected from the following:	12
EDUB 7700	Contemplative, Holistic, and Integrative Education: The Self	
EDUB 7710	Contemplative, Holistic, and Integrative Education: The Social, Cultural, and Ecological	
EDUB 7720	Approaches to Contemplative, Holistic, and Integrative Curriculum and Pedagogy	
EDUB 7730	Being an Educator in Contemplative, Holistic, and Integrative Education	
EDUB 7740	Recent Topics in Research in Contemplative, Holistic, and Integrative Education	
EDUA 7830	Engaging with Research in Education [1]	3
EDUA/B XXXX	Research Methods Course [2]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

[1] EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

[2] A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Courses - 12 credit hours from the following:	12
EDUB 7700	Contemplative, Holistic, and Integrative Education: The Self	
EDUB 7710	Contemplative, Holistic, and Integrative Education: The Social, Cultural, and Ecological	
EDUB 7720	Approaches to Contemplative, Holistic, and Integrative Curriculum and Pedagogy	
EDUB 7730	Being an Educator in Contemplative, Holistic, and Integrative Education	
EDUB 7740	Recent Topics in Research in Contemplative, Holistic, and Integrative Education	
EDUA/B XXXX	Concentration Courses [1]	6
EDUA/B XXXX	Elective Courses [2]	9
EDUA 7830	Engaging with Research in Education [3]	3
	Hours	**30**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**30**

[1] In consultation with the advisor, 6 credit hours of coursework selected from:

- EDUB 7740 Recent Topics in Research in Contemplative, Holistic, and Integrative Education (3)
- EDUB 7750 Seminar in Studies in Contemplative, Holistic, and Integrative Education (3)
- Any 7000-level course deemed relevant to the concentration as determined and approved by the advisor and the department head.

2 In consultation with the advisor, 9 credit hours of elective coursework selected from 5000 and 7000 level courses offered in the Faculty of Education.

3 EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

Studies in Mathematics Education and Science Education Concentration (Studies in MESE)

Students will explore theories, research, policies and practices in mathematics education and science education as well as various intersections between the two disciplines. Mathematics education and/or science education will be examined in K-12 and post-secondary settings as well as in settings beyond schools. Throughout the program, students will consider the social, cultural, ethical, human rights and sustainability dimensions of mathematics education and/or science education.

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Course - 3 credit hours:	3
EDUB 7492	Recent Advances in Mathematics Education and Science Education	
EDUA/B XXXX	Concentration Courses [1]	6
EDUA/B XXXX	Elective Courses [2]	3
EDUA 7830	Engaging with Research in Education [3]	3
EDUA/B XXXX	Research Methods Course [4]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

1 One 3-credit-hour course at the 7000 level and one 3-credit-hour course at the 5000 level or above. Both courses must be deemed relevant to the concentration as determined and be approved by the advisor and the department head.

2 Three (3) credit hours of coursework at 5000 level or above from the Faculty of Education. In addition, up to 6 more credit hours of coursework may be selected at the 5000 level or above from the Faculty of Education.

3 EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

4 A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUB 7XXX	Core Course - 3 credit hours:	3
EDUB 7492	Recent Advances in Mathematics Education and Science Education	
EDUA/B XXXX	Concentration Courses [1]	12
EDUA/B XXXX	Elective Courses [2]	12
EDUA 7830	Engaging with Research in Education [3]	3
	Hours	**30**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**30**

1 A total of 12 credit hours of coursework of which 6 credit hours must at the 7000 level and 6 credit hours must be at the 5000 level or above. All courses must be approved by the advisor and the department head.

2 Twelve (12) credit hours of coursework as electives. Six (6) credit hours must be from courses offered in the Department of Curriculum, Teaching and Learning of which 3 credit hours are at 7000 level and 3 credit hours at the 5000 level or above. In addition, 3 credit hours must be from the courses offered in the Faculty of Education at the 7000 level and 3 credit hours from courses offered in the Faculty of Education (5000 level or above) or another faculty (3000 level or above).

3 EDUA 7830 or its equivalent, is a pre-requisite to all EDUA and EDUB research methods courses.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Registration Times and Status

Students are able to view their registration times on Aurora Student (https://aurora.umanitoba.ca/banprod/twbkwbis.P_GenMenu/?name=homepage) select Enrolment & Academic Records, select Registration, and then Registration Times and Status to view registration dates and times for a given term.

Students must ensure that courses to be taken have been approved and entered on their program approval form. If not approved, students should meet with their program advisor to select and approve the courses to be taken.

Continuing Courses (CO's)

The deadline for completion is normally not later than one year from the end of the term in which the course was originally registered. If the course is not completed by August 31, students must re-register for the course(s) for the next term in order to finish the course and to receive a grade.

Occasional Students

Prior to registration, students must obtain written permission from the department head for 7000 level Education courses. This permission must be submitted to the Office of Graduate and Professional Programs, and Research prior to attempting to register.

Registration for Student Initiated Courses

Prior to registration for student initiated courses, students must have the Student Initiated Form approved by their instructor and the department head and submitted to the Office of Graduate and Professional Programs,

and Research. Upon receipt of the form, a Faculty of Education staff will schedule the course and contact the student with further instructions.

Registering for Courses Offered in Other Faculties

Education graduate students wanting to register for graduate courses outside the Faculty of Education are encouraged to contact the department concerned for registration procedures. In some cases, written approval may be required from the instructor and department head of the course requested. The written approval must be presented to the Office of Graduate and Professional Programs, and Research prior to attempting to register.

Students Registered in Other Faculties or Schools

Students registered in other faculties or schools wishing to register for an Education course may do so after a certain date. For details, see the Class Schedule schedule link on Aurora (https://aurora.umanitoba.ca/) for a given term and given course.

Visiting Students

Students who are working on a graduate program at another institution and wish to register for a graduate course at the University of Manitoba with the express purpose of having credit transferred to their home university must apply for admission to the Faculty of Graduate Studies by the published application deadline dates. Also, a letter of permission from their home university must be submitted to the Office of Graduate and Professional Programs, and Research, Faculty of Education prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Education, Ph.D.

Education
Head: Melanie Janzen
Campus Address/General Office: 203 Education Building
Telephone: 204-474-9004
Fax: 204-474-7551
Email Address: GradPrograms.Education@umanitoba.ca
Website: umanitoba.ca/education/ (https://www.umanitoba.ca/education/)
Academic Staff: Please see the Education website (https://umanitoba.ca/education/faculty-staff/) for academic staff listing.

Education Ph.D. Program Information

The Education PhD program educates teaching professionals as researchers, leading to a Doctor of Philosophy degree. Applications for doctoral studies in Education are made to either a specific *cohort* or the *individualized* program (http://umanitoba.ca/education (http://umanitoba.ca/education/)).

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Education Ph.D. Admission Requirements

Successful applicants must possess:

1. an earned Master's degree from a recognized institution;
2. appropriate academic background as defined by the program area to which admission is being sought (see the Education website (https://umanitoba.ca/education/programs-study/#phd-in-education) for a listing of program areas and associated admission requirements);
3. appropriate research capability as evidenced by one of:
   i. thesis from a recognized institution;
   ii. major research paper from a recognized institution plus a successfully completed 3 credit-hour 7000-level (or equivalent) research methods course;
   iii. major contribution to a research article published in a refereed journal plus a successfully completed 3 credit-hour 7000-level (or equivalent) research methods course; or
   iv. a research/scholarly/creative product and coursework equivalent to one of the above (3i to 3iii).
4. normally, appropriate occupational or service experience, such as:

i. educational or administrative work or service in a school, post-secondary or similar setting;
ii. practice in school counseling, psychology, or related profession;
iii. work, service, or practice equivalent to (4i) or (4ii).

Please note that earning a Ph.D. in Education does not certify one to teach in the province of Manitoba.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Ph.D. Education program of study (https://umanitoba.ca/explore/programs-of-study/education-phd/) page.

Degree Requirements

Twenty-one (21) credit hours of coursework are subject to the following regulations:

a. 9 credit hours of coursework at the 7000 level must be in the student's program area and must include the program core coursework common to all students in the program area (See the Education web site for specifics www.umanitoba.ca/education (http://www.umanitoba.ca/education/)).

For students admitted to study in an *individualized* program rather than to a defined program area, the program area coursework is specific to the individual student and is defined by the Advisory Committee rather than by members of a defined program area;

b. 6 credit hours must be in a support area(s); and

c. 6 credit hours must be in research methods.

EDUA 7830 Engaging with Research in Education (3 credit hours) or an equivalent course is a pre-requisite or concurrent course to most Education 7000 level research courses. Applicants without this course will be required to take the course as an Occasional Student (O) and pay the appropriate course fee. This will be in addition to Ph.D. course requirements.

Where necessary, the student may be required to complete additional background coursework, as an auxiliary course or as an Occasional (O) student. If the latter, the student must pay the appropriate course fee.

Expected Time to Graduate: 3 - 4 years

Progression Chart

Course	Title	Hours
Years 1-2		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select 9 credit hours in Program Area Courses [1]		9
Select 6 credit hours in Cognate Area Courses [1]		6
Select 6 credit hours in Research Methods / Analysis Courses [1]		6
	Hours	**21**
Years 2-3		
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**21**

1
- A minimum of 18 credit hours of coursework must be at the 7000 level.
- All courses taken in the Faculty of Education must be at the 7000 level or above.
- Courses taken outside the Faculty of Education must be at the 3000 level or above.
- A minimum of 12 credit hours of coursework must be taken in the Faculty of Education.
- When relevant to the student's area of research and study, students are encouraged to take courses outside of the Faculty of Education of the University of Manitoba.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Registration Times and Status

Students are able to view their registration times on Aurora Student (https://aurora.umanitoba.ca/banprod/twbkwbis.P_GenMenu/?name=homepage) select Enrolment & Academic Records, select Registration, and then Registration Times and Status to view registration dates and times for a given term.

Students must ensure that courses to be taken have been approved and entered on their program approval form. If not approved, students should meet with their program advisor to select and approve the courses to be taken.

Continuing Courses (CO's)

The deadline for completion is normally not later than one year from the end of the term in which the course was originally registered. If the course is not completed by August 31, students must re-register for the course(s) for the next term in order to finish the course and to receive a grade.

Occasional Students

Prior to registration, students must obtain written permission from the department head for 7000 level Education courses. This permission must be submitted to the Office of Graduate & Professional Programs, and Research prior to attempting to register.

Registration for Student Initiated Courses

Prior to registration for student initiated courses, students must have the Student Initiated Form approved by their instructor and the department head and submitted to the Office of Graduate & Professional Programs, and Research. Upon receipt of the form, a Faculty of Education staff will schedule the course and contact the student with further instructions.

Registering for Courses Offered in Other Faculties

Education graduate students wanting to register for graduate courses outside the Faculty of Education are encouraged to contact the department concerned for registration procedures. In some cases, written approval may be required from the instructor and department head of the

course requested. The written approval must be presented to the Office of Graduate & Professional Programs, and Research prior to attempting to register.

Students Registered in Other Faculties or Schools

Students registered in other faculties or schools wishing to register for an Education course may do so after a certain date. For details, see the Class Schedule schedule link on Aurora (https://aurora.umanitoba.ca/) for a given term and given course.

Visiting Students

Students who are working on a graduate program at another institution and wish to register for a graduate course at the University of Manitoba with the express purpose of having credit transferred to their home university must apply for admission to the Faculty of Graduate Studies by the published application deadline dates. Also, a letter of permission from their home university must be submitted to the Office of Graduate & Professional Programs, and Research, Faculty of Education prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Educational Administration, Foundations and Psychology, M.Ed.

Educational Administration, Foundations and Psychology
Head (Acting)/Graduate Chair: Robert Renaud
Campus Address/General Office: 203 Education Building
Telephone: 204-474-9004
Fax: 204-474-7551
Email Address: GradPrograms.Education@umanitoba.ca
Website: umanitoba.ca/education/ (https://www.umanitoba.ca/education/)
Academic Staff: Please see the Education website (https://umanitoba.ca/education/faculty-staff/) for academic staff listing.

Educational Administration, Foundations and Psychology Program Information

The Department of Educational Administration, Foundations, and Psychology offers a Master of Education degree with concentrations in the areas of adult and post-secondary education; counselling psychology; cross-cultural, sociological, and philosophical foundations in education; educational administration; and inclusive education.

Please note that earning a Master of Education does not certify one to teach in the province of Manitoba.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Educational Administration, Foundations and Psychology Admission Requirements

Applicants must possess:

- A four-year Bachelor of Education degree, or two-year After-Degree Bachelor of Education, or a four-year bachelor's degree (or academically equivalent degree/program) from an academic institution recognized by the Faculty of Graduate Studies, or a three-year undergraduate degree, plus a Post-Baccalaureate Diploma in Education (PBDE) with a minimum of 18 credit hours at the 5000 level.
- A grade point average of 3.0 or better in the last 60 credit hours of university coursework.
- Normally, two years of relevant work experience.
- Appropriate academic and/or professional background for the program area and concentration.

The Counselling Psychology and Inclusive Education concentrations require specific prerequisite coursework that must be completed prior to the start of the M.Ed. program.

Individuals who graduate from the Certificate in Adult and Continuing Education (CACE), University of Manitoba must complete the following courses:

Course	Title	Hours
EDUA 1560	Adult Learning and Development	3
EDUA 1570	Foundations of Adult Education	3
EDUA 1580	Program Planning in Adult Education	3
EDUA 1590	Facilitating Adult Education	3
An additional 100 hours of elective credit through courses, seminars, and workshops		100

The Faculty of Graduate Studies recognizes a complete CACE program as 15 credit hours towards the admission requirements for the M.Ed.; that is, giving 12 credit hours for the four core courses completed with a grade of 'B' or better and 3 credit hours (non assessable) for the 100 hours of elective study.

Individuals with a three-year undergraduate degree and the four courses listed above must complete an additional 12 credit hours of senior level courses (i.e., 5000 level PBDE courses, 1000 or 2000 level B.Ed. courses, or courses at the 3000 level or above in other faculties) to have the 24 credit hours that are the minimal requirements for satisfying the "honours degree or equivalent" admission requirement. Those with the completed CACE would require an additional 9 credit hours of senior level courses.

Admission to the M.Ed. program is competitive. A number of factors are taken into account in arriving at an admission decision:

1. the capacity of the department to provide the program of study requested by the applicant;
2. the applicant's previous academic background and achievement;
3. the referees' assessment of the applicant;
4. the capacity of the department to provide the applicant with an advisor in the program area; and
5. the applicant's Statement in Support of their application, including relevant professional experience.

For full application requirements, see M.Ed. Educational Administration, Foundations and Psychology program of study (https://umanitoba.ca/explore/programs-of-study/educational-administration-foundations-and-psychology-med/) page.

Transfer of Credit

The granting of advanced credit is subject to the regulations of the Faculty of Graduate Studies and subject to approval of the program advisor and department head.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Ed. Educational Administration, Foundations and Psychology program of study (https://umanitoba.ca/explore/programs-of-study/educational-administration-foundations-and-psychology-med/) page.

Degree Requirements

The M.Ed. in Educational Administration, Foundations and Psychology has a thesis-based route and a course-based route. The M.Ed. course-based route at the University of Manitoba is typically a terminal degree. That is, it is insufficient, in number and of itself, as evidence of research capacity for admission into the Ph.D. in Education program at the University of Manitoba.

The following program requirements apply to all concentrations in the Department of Educational Administration, Foundations and Psychology. Specific concentration requirements are listed under each concentration below.

Not all courses are offered every year. The graduate course offering schedule is posted on the Faculty's website. Although we offer many courses yearly, most of our courses are offered in the evening and those wishing to study full-time should consult with the department head.

Expected Time to Graduate: full-time: 2 - 3 years; part time: 4 - 5 years.

Program by Coursework and Thesis

- A minimum of 18 credit hours of coursework. At least 12 credit hours must be at the 7000 level or equivalent. The remaining 6 credit hours may be at the 5000 level or above in the Faculty of Education and/or at the 3000 level or above in other faculties.
- EDUA 7830 or its equivalent, is a requirement of all M.Ed. programs in the Faculty of Education. In addition, thesis students must take 3 credit hours of research methods at the 7000 level. In special circumstances research courses at the 3000 level or above in other faculties may be approved as an appropriate alternative to this requirement.

Program by Coursework and Comprehensive Examination (Course-based)

- A minimum of 30 credit hours of coursework. At least 18 credit hours must be at the 7000 level or equivalent. The remaining 12 credit hours may be at the 5000 level or above in the Faculty of Education and/or at the 3000 level or above in other faculties.
- EDUA 7830 or its equivalent, is a requirement of all M.Ed. programs in the Faculty of Education.

Progression Charts

Adult and Post-Secondary Education Concentration

The Master of Education in Adult and Post-Secondary Education program is designed to develop leadership in adult education in a wide variety of settings, including universities, community colleges, technical and vocational education, adult learning centres, business and industry and health and social services agencies.

The Master of Education in Adult and Post-Secondary Education balances research, theory, policy and practice and is based on four primary components: a foundational knowledge base, a professional knowledge base, methodological knowledge base and experiential learning.

Program Requirements are those listed above. Specific course requirements are as follows:

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7402	Development of Adult Education and Post-Secondary Education	3
EDUA 7404	Lifelong Learning in Educational Settings	3

EDUA/B XXXX	Concentration Courses (see below)	6
EDUA 7830	Engaging with Research in Education [1]	3
EDUA/B XXXX	Research Methods Course [2]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

1 EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

2 A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Concentration Courses

Six (6) credit hours of coursework from the following course list, or other courses approved by the advisor and the department head.

Course	Title	Hours
EDUA 7406	Topics in Adult and Post-Secondary Education	3
EDUA 7412	Governance of Post-Secondary Education	3
EDUA 7414	Seminar in the Administration of Post-Secondary Education	3
EDUB 7416	Teaching and Learning in Post-Secondary Education	3
EDUA 7420	Program Planning in Adult Education	3
EDUA 7810	Evaluating Educational Programs	3
EDUB 7390		3
EDUB 7420	Study of Teaching	3
EDUB 7430		3
EDUB 7450	Seminar in Educational Technology	3
EDUB 7460	Information Technology and Education	3
EDUB 7560	Theory and Practice of Curriculum Design and Development	3

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7402	Development of Adult Education and Post-Secondary Education	3
EDUA 7404	Lifelong Learning in Educational Settings	3
EDUA 7408	Seminar in Adult and Post-Secondary Education	3
EDUA/B XXXX	Concentration Courses (see below)	9
COURSE XXXX	Elective Courses	9
EDUA 7830	Engaging with Research in Education [1]	3
	Hours	**30**
Years 2-5		
GRAD 7010	Comprehensive Examination	0
	Hours	**0**
	Total Hours	**30**

1 EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

Concentration Courses

Nine (9) credit hours of coursework from the following course list, or other courses approved by the advisor and the department head.

Course	Title	Hours
EDUA 7406	Topics in Adult and Post-Secondary Education	3
EDUA 7412	Governance of Post-Secondary Education	3
EDUA 7414	Seminar in the Administration of Post-Secondary Education	3
EDUB 7416	Teaching and Learning in Post-Secondary Education	3
EDUA 7420	Program Planning in Adult Education	3
EDUA 7810	Evaluating Educational Programs	3
EDUB 7390		3
EDUB 7420	Study of Teaching	3
EDUB 7430		3
EDUB 7450	Seminar in Educational Technology	3
EDUB 7460	Information Technology and Education	3
EDUB 7560	Theory and Practice of Curriculum Design and Development	3
Elective Courses: Students are required to take 9 credit hours of approved elective courses.		

Counselling Psychology (formerly Guidance and Counselling) Concentration

The Master's Program in Counselling Psychology prepares graduates to integrate critical knowledge and understanding of the theoretical bases of counselling, and develops counselling skills. The model of training is that of a scientist-practitioner with an emphasis on reflective practice.

Specifically, the graduate program is designed to help students with:

- Developing individual and group counselling skills;
- Conducting and interpreting current research;
- Increasing their knowledge of the latest developments in counselling and literature;
- Training in group leadership and communication skills;
- Providing career development, career information and job search skills;
- The principles, processes and methods of interviewing children, adolescents and adults; and
- The skills of measurement and evaluation.

The program provides an array of supervised practicum placements that can support more specialized experience to meet individual needs and interests. Our graduates have found employment in a wide range of settings including schools, community agencies, clinics, hospitals, business and industry, rehabilitation centres, government services and private practice.

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
EDUA 7520	Practicum Seminar in Counselling [1]	6
EDUA 7550	Theories of Counselling	3
EDUA XXXX	Concentration Courses (see below)	3
EDUA 7830	Engaging with Research in Education [2]	3
EDUA/B XXXX	Research Methods Course [3]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

1 EDUA 7520 is a 3-hour weekly seminar offered over fall and winter terms taken concurrently with a minimum of 180 hours of supervised practicum experience in a selected placement. Students are required to be available September to April during the day for a minimum of one to one-and-a-half days per week for the practicum component.

2 EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

3 A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Concentration Courses

Three (3) credit hours of coursework from the following course list, or other courses approved by the advisor and the department head.

Course	Title	Hours
EDUA 5480	Counselling Skills	3
EDUA 5520	Ethics in Counselling	3
EDUA 7510	Seminar in Current Issues in Counselling	3
EDUA 7530	Group Counselling: Theory and Practice	6
EDUA 7540	Programs in Career Development	3
EDUA 7710	Development in Learning Environments	3
EDUA 7750	Topics in Educational Psychology 2 [1]	3
EDUA 7760	Interview Techniques with Children and Adolescents	3

Usually, the program will be 27 credit hours plus a thesis.

1 EDUA 7750 requires advisor approval.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7520	Practicum Seminar in Counselling [1]	6
EDUA 7550	Theories of Counselling	3
EDUA XXXX	Concentration Courses (see below)	18
EDUA 7830	Engaging with Research in Education [2]	3
	Hours	**30**
Years 2-5		
GRAD 7010	Comprehensive Examination	0
	Hours	**0**
	Total Hours	**30**

1 EDUA 7520 is a 3-hour weekly seminar offered over fall and winter terms taken concurrently with a minimum of 180 hours of supervised practicum experience in a selected placement. Students are required to be available September to April during the day for a minimum of one to one-and-a-half days per week for the practicum component.

2 EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

Concentration Courses

Eighteen (18) credit hours of coursework from the following course list, or other courses such as 5000 level Guidance and Counseling courses or courses from other Faculties, approved by the advisor and the department head.

Course	Title	Hours
EDUA 5480	Counselling Skills	3
EDUA 5520	Ethics in Counselling	3
EDUA 7510	Seminar in Current Issues in Counselling	3
EDUA 7530	Group Counselling: Theory and Practice	6
EDUA 7540	Programs in Career Development	3
EDUA 7710	Development in Learning Environments	3
EDUA 7750	Topics in Educational Psychology 2 [1]	3
EDUA 7760	Interview Techniques with Children and Adolescents	3

Usually, the program will be 33 credit hours plus a comprehensive exam.

1 EDUA 7750 requires advisor approval.

Cross-cultural, Sociological, and Philosophical Foundations in Education (formerly Social Foundations of Education) Concentration

The MEd Program in Cross-cultural, Sociological, and Philosophical Foundations in Education focuses on the philosophical and social factors that influence teaching and learning in schools. Faculty members have studied in a number of countries, including Australia, Canada, France, New Zealand, the Philippines, the United States and the United Kingdom. The program focuses on understanding both the assumptions and the evidence that supports the great variety of educational programs in these and other countries. The research by faculty members has been directed at understanding and contributing to the on-going debates about educational policies and practices.

The courses in the program are based on the disciplines of anthropology, philosophy, and sociology. As such, graduate students may focus on:

- Aboriginal Education
- Educational Philosophy
- Educational Sociology
- Intercultural and International
- Education Policies and Practices in Education

Program Requirements are those listed above. Specific course requirements are as follows:

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
EDUA 7XXX	Two of the following core courses:	6
EDUA 7200	Philosophy of Education	
EDUA 7210	Educational Sociology	
EDUA 7270	Seminar in Cross-Cultural Education 1	
EDUA XXXX	Concentration Courses (see below)	6
EDUA 7830	Engaging with Research in Education [1]	3
EDUA/B XXXX	Research Methods Course [2]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

1 EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

2 A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Concentration Courses

Six (6) credit hours of coursework from the following course list, or other courses selected from the Department of Curriculum, Teaching and Learning, the Faculty of Arts at the University of Manitoba or other universities, and approved by the advisor and the department head.

Course	Title	Hours
EDUA 7230	Social Criticism in Education	3
EDUA 7240	Values in Education	3
EDUA 7250	Comparative Education	3
EDUA 7270	Seminar in Cross-Cultural Education 1	3
EDUA 7280	Seminar in Cross-Cultural Education 2	3
EDUA 7300	History of Canadian Education from 1867	3
EDUA 7340	Seminar in Educational Thought	3

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7200	Philosophy of Education	3
EDUA 7210	Educational Sociology	3
EDUA 7270	Seminar in Cross-Cultural Education 1	3
EDUA XXXX	Concentration Courses (see below)	18
EDUA 7830	Engaging with Research in Education [1]	3
	Hours	**30**
Years 2-5		
GRAD 7010	Comprehensive Examination	0
	Hours	**0**
	Total Hours	**30**

1 EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

Concentration Courses

Eighteen (18) credit hours of coursework from the following course list, or other courses selected from the Department of Curriculum, Teaching and Learning, the Faculty of Arts at the University of Manitoba or other universities, and approved by the advisor and the department head.

Course	Title	Hours
EDUA 7230	Social Criticism in Education	3
EDUA 7240	Values in Education	3
EDUA 7250	Comparative Education	3
EDUA 7280	Seminar in Cross-Cultural Education 2	3
EDUA 7300	History of Canadian Education from 1867	3
EDUA 7340	Seminar in Educational Thought	3

Educational Administration Concentration

The Educational Administration Area Group at the University of Manitoba is unique in Canada. Our faculty are highly interdisciplinary in their studies of educational administration. Interdisciplinary approaches are designed for educational leaders to develop multi-layered understandings of their practice, and as a result, make decisions that improve work and learning experiences and outcomes. The faculty has strong connections to Indigenous perspectives, social justice and equity studies, primary, secondary, adult, and higher education, community organizations, sociology, psychology, and cross-cultural and international perspectives. The faculty infuse interdisciplinary lenses into the traditional foundations of educational administration, breaking new ground and generating greater impact in their teaching and research.

The Master of Education in Educational Administration program is designed to develop leadership for educational systems, and to provide students with an in-depth and theoretical understanding of educational administration as both a moral and a technical endeavour. Students in this program will benefit from their prior experiences as teachers or administrators in an educational organization.

In addition to courses during the regular academic session, the Master of Education in Educational Administration program frequently offers Summer Institutes in Educational Administration, which have included Equity and Diversity, International Perspectives on School Improvement, School and Community, and Law and Ethics in Educational Administration.

Provincial Certification

It is expected that all candidates in the Master's Program with a concentration in Educational Administration will attain provincial certification in Educational Administration (Certificate in School Leadership) by the time they complete their Master's degree. In some instances, this may require additional coursework. Certification is granted by Manitoba Education and Early Childhood Learning and not by the Faculty of Education or the University of Manitoba.

Program Requirements are those listed above. Specific course requirements are as follows:

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7010	Educational Administration as a Field of Study and Practice	3
EDUA 7050	Theoretical Perspectives on Educational Administration	3

EDUA XXXX	Concentration Courses (see below)	6
EDUA 7830	Engaging with Research in Education [1]	3
EDUA/B XXXX	Research Methods Course [2]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

[1] EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

[2] A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Concentration Courses

In consultation with the advisor, 6 credit hours of coursework of which at least 3 credit hours must be at the 7000 level from the following course list, or other courses approved by the advisor and the department head.

Course	Title	Hours
EDUA 5040	Personnel Administration in Education	3
EDUA 5100	Issues in the Administration of Education	3
EDUA 7020	Politics of Education	3
EDUA 7030	Educational Finance	3
EDUA 7040	Legal Aspects of Education	3
EDUA 7060	Organizational Planning and Development in Education	3
EDUA 7070	The Analysis of Educational Organizations	3
EDUA 7082	Indigenous Instructional Leadership	3

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7010	Educational Administration as a Field of Study and Practice	3
EDUA 7050	Theoretical Perspectives on Educational Administration	3
One of the following:		3
EDUA 7200	Philosophy of Education	
EDUA 7210	Educational Sociology	
EDUA 7270	Seminar in Cross-Cultural Education 1	
EDUA XXXX	Concentration Courses (see below)	12
COURSE XXXX	Elective Courses	6
EDUA 7830	Engaging with Research in Education [1]	3
	Hours	**30**
Years 2-5		
GRAD 7010	Comprehensive Examination	0
	Hours	**0**
	Total Hours	**30**

[1] EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

Concentration Courses

In consultation with the advisor, 12 credit hours of coursework from the following course list, or other courses approved by the advisor and the department head.

Course	Title	Hours
EDUA 5040	Personnel Administration in Education	3
EDUA 5100	Issues in the Administration of Education	3
EDUA 7020	Politics of Education	3
EDUA 7030	Educational Finance	3
EDUA 7040	Legal Aspects of Education	3
EDUA 7060	Organizational Planning and Development in Education	3
EDUA 7070	The Analysis of Educational Organizations	3
EDUA 7082	Indigenous Instructional Leadership	3

Elective Courses: Students are required to take 6 credit hours of approved elective courses.

Inclusive Education (formerly Inclusive Special Education) Concentration

The Master of Education in Inclusive Education program provides individuals with the skills, knowledge, and experiences they need to promote inclusive educational opportunities for students with diverse needs. The program focuses on inclusion from the lens of persons with disabilities and learning differences, however, individuals from other marginalized groups may also be examined. Students in the program will develop a multi-layered understanding of inclusive education that balances current and relevant research, important theoretical frameworks, and practical implications. Graduate courses enable students to conduct research from a variety of methodological perspectives, lead the professional development of their colleagues, foster program development at their workplaces, and provide clinical or consultant services to classroom teachers. Our graduates work as inclusive education administrators, clinicians, consultants, program leaders, resource/learning support teachers, and other professionals in the area of inclusion.

Certification in Special Education

This provision may not apply to applicants with certification requirements in an allied non-teaching field or who are pursuing a M.Ed. in Inclusive Education after undergraduate work in an allied non-teaching field. It is expected that most students in the M.Ed. Program with concentration in Inclusive Education will attain provincial certification in special education by the time they complete their Master's degree. Students who already have provincial certification at the time of entry into the program will therefore not need to take any prerequisite coursework for this purpose. Those who do not already have provincial certification, however, should expect to take additional credit hours of coursework to fulfil this requirement. The precise number and nature of the additional work will depend on the prior academic background of the student, as well as on the specific courses taken to complete the M.Ed. degree. To assess the additional work needed informally, it is recommended that students consult with their Faculty Advisor early in their program, and also obtain and read a copy of the special education certification guidelines published by Manitoba Education and Early Childhood Learning. Official assessment of required coursework, however, can only be done by providing Manitoba Education and Early Childhood Learning with a complete set of academic transcripts and requesting a formal assessment from them. Certification is granted by Manitoba Education

and Early Childhood Learning not by the Faculty of Education or the University of Manitoba.

In addition to the Program Requirements listed above, admission to the Inclusive Education concentration requires the following prerequisite coursework, which must be completed prior to beginning the M.Ed. program:

A minimum of 6 credit hours of university level coursework at the 5000 level or equivalent with a Grade Point Average of 3.0 (B) or better, consisting of:

Course	Title	Hours
EDUA 5602	Introduction to Inclusive Education	6
	or similar coursework from a related Degree program, such as Special Education, Psychology, Disability Studies, Social Work, or Counselling.	
Total Hours		**6**

Thesis Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7602	Seminar in Inclusive Education	6
EDUA XXXX	Concentration Courses (see below)	6
EDUA 7830	Engaging with Research in Education [1]	3
EDUA/B XXXX	Research Methods Course [2]	3
	Hours	**18**
Years 2-5		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**18**

1 EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

2 A 7000 level, 3-credit hour research methods course in the Faculty of Education or 3000 level or above in other faculties.

Concentration Courses

Six (6) credit hours of coursework with a minimum of 3 credit hours at the 7000 level from the following course list, or other courses approved by the advisor and the department head.

Course	Title	Hours
EDUA 7610	Behavioural Issues in Educational Settings	3
EDUA 7630	Advanced Assessment and Instruction in Inclusive Education	3
EDUA 7652	Field Experience in Inclusive Education	6
EDUA 7740	Topics in Educational Psychology 1 [1]	3
EDUA 7750	Topics in Educational Psychology 2 [1]	3
EDUA 5614	Working with Vulnerable Children: An Introduction to Trauma Care	3
EDUA 5620	Teaching Children Through Alternative and Augmented Communication	3
EDUA 5642	Inclusive Education: Transition from School to Adult Life	3
EDUA 5662	Delivering Supports for Inclusive Education	3
EDUA 5680	Promoting Responsible Behaviour in Educational Settings	3

1 EDUA 7740 and EDUA 7750 require advisor approval.

Course Based

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
EDUA 7602	Seminar in Inclusive Education	6
EDUA XXXX	Concentration Courses (see below)	21
EDUA 7830	Engaging with Research in Education [1]	3
	Hours	**30**
Years 2-5		
GRAD 7010	Comprehensive Examination	0
	Hours	**0**
	Total Hours	**30**

1 EDUA 7830 is a pre-requisite to all EDUA and EDUB research methods courses.

Concentration Courses

Twenty-one (21) credit hours of coursework with a minimum of 12 credit hours at the 7000 level from the following course list, or other courses approved by the advisor and the department head.

Course	Title	Hours
EDUA 7610	Behavioural Issues in Educational Settings	3
EDUA 7630	Advanced Assessment and Instruction in Inclusive Education	3
EDUA 7652	Field Experience in Inclusive Education	6
EDUA 7740	Topics in Educational Psychology 1 [1]	3
EDUA 7750	Topics in Educational Psychology 2 [1]	3
EDUA 5614	Working with Vulnerable Children: An Introduction to Trauma Care	3
EDUA 5620	Teaching Children Through Alternative and Augmented Communication	3
EDUA 5642	Inclusive Education: Transition from School to Adult Life	3
EDUA 5662	Delivering Supports for Inclusive Education	3
EDUA 5680	Promoting Responsible Behaviour in Educational Settings	3

1 EDUA 7740 and EDUA 7750 require advisor approval.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Registration Times and Status

Students are able to view their registration times on Aurora Student (https://aurora.umanitoba.ca/banprod/twbkwbis.P_GenMenu/?

name=homepage) select Enrolment & Academic Records, select Registration, and then Registration Times and Status to view registration dates and times for a given term.

Students must ensure that courses to be taken have been approved and entered on their program approval form. If not approved, students should meet with their program advisor to select and approve the courses to be taken.

Continuing Courses (CO's)

The deadline for completion is normally not later than one year from the end of the term in which the course was originally registered. If the course is not completed by August 31, students must re-register for the course(s) for the next term in order to finish the course and to receive a grade.

Occasional Students

Prior to registration, students must obtain written permission from the department head for 7000 level Education courses. This permission must be submitted to the Office of Graduate & Professional Programs, and Research prior to attempting to register.

Registration for Student Initiated Courses

Prior to registration for student initiated courses, students must have the Student Initiated Form approved by their instructor and the department head and submitted to the Office of Graduate & Professional Programs, and Research. Upon receipt of the form, a Faculty of Education staff will schedule the course and contact the student with further instructions.

Registering for Courses Offered in Other Faculties

Education graduate students wanting to register for graduate courses outside the Faculty of Education are encouraged to contact the department concerned for registration procedures. In some cases, written approval may be required from the instructor and department head of the course requested. The written approval must be presented to the Office of Graduate & Professional Programs, and Research prior to attempting to register.

Students Registered in Other Faculties or Schools

Students registered in other faculties or schools wishing to register for an Education course may do so after a certain date. For details, see the Class Schedule schedule link on Aurora (https://aurora.umanitoba.ca/) for a given term and given course.

Visiting Students

Students who are working on a graduate program at another institution and wish to register for a graduate course at the University of Manitoba with the express purpose of having credit transferred to their home university must apply for admission to the Faculty of Graduate Studies by the published application deadline dates. Also, a letter of permission from their home university must be submitted to the Office of Graduate & Professional Programs, and Research, Faculty of Education prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Faculty of Graduate Studies

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Applied Health Sciences, Ph.D. (p. 236)	4	18	
Disability Studies, M.A. (p. 238)	2	24	
Disability Studies, M.Sc. (p. 240)	2	24	
Individual Interdisciplinary Studies, Master's (p. 242)	2	60	

Individual Interdisciplinary Studies, Ph.D. (p. 243)	4	60
Peace and Conflict Studies, M.A. (p. 244)	2	18-30
Peace and Conflict Studies, Ph.D. (p. 246)	4	24

Applied Health Sciences, Ph.D.

Applied Health Sciences
Program Director: Dr. Sandra Webber
Campus Address/General Office: 202 Active Living Centre
Telephone: 204-474-7806
Email Address: ahs_phd@umanitoba.ca
Website: umanitoba.ca/explore/programs-of-study/applied-health-sciences-phd (https://umanitoba.ca/explore/programs-of-study/applied-health-sciences-phd/)
Academic Staff: Please refer to the FKRM (https://umanitoba.ca/kinesiology-recreation-management/faculty-staff/) and Rehabilitation Sciences (https://umanitoba.ca/rehabilitation-sciences/research-and-scholarly-activity/#our-researchers) websites.

Applied Health Sciences Program Information

This program is a multi-unit, research-based Doctor of Philosophy in Applied Health Sciences, coordinated by Kinesiology and Recreation Management, and Rehabilitation Sciences.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Applied Health Sciences Admission Requirements

Applicants would normally possess a research-based Master's degree in a discipline or profession consistent with Applied Health Sciences. Applicants who do not possess a research-based Master's degree, but who have some research experience will be assessed on a case-by-case basis, as will those with professional Master's degrees.

Prior to admission to the Ph.D. program, the applicant will be required to specify their area of research interest, and to have corresponded with an eligible Ph.D. advisor(s) (member of the Faculty of Graduate Studies), who is (are) a faculty member (primary appointment) in one of the two participating units, and who is (are) willing to accept them into the program.

Elements taken into consideration in determining the acceptance of the applicant into the program: grade-point average in Master's courses, previous courses taken, specific research interest of the applicant, student's rationale for choosing to apply to this program as opposed to a uni-discipline degree, current profile of students in the program, research funding and facilities availability through the proposed advisor(s) for the proposed research, and financial support for the applicant.

No admission tests are required for this program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Applied Health Sciences Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/applied-health-sciences-phd/) page.

Degree Requirements

The coursework requirement will consist of a minimum of twelve credit hours of 7000-level coursework (18 credit hours of coursework for students entering program without a research-based Master's Degree).

Students will be required to take AHS 7000, a lecture/seminar course in which faculty members from the participating academic units take part (3 credits). This course is designed to promote in students advanced knowledge, skills, and abilities needed to evaluate and conduct multidisciplinary, applied health research.

Nine credit hours may be chosen from a combination of graduate courses from the participating units or from other faculties outside the participating units that offer graduate courses related to applied health sciences (3 credits).

Students who entered the program without a research-based Master's degree are required to take AHS 7010 over the first two years of their program.

Courses must be selected by the student in consultation with the advisor. All courses must be recorded on the "AHS Internal Program Approval Form", and submitted to the AHS Program Assistant for approval by the AHS Program Director.

Students in the program will also be required to take part in a monthly seminar in Applied Health Sciences with mandatory attendance for two years (Year 1: AHS 7002; Year 2: AHS 7004), a requirement for graduation. Students will also be required to take part in yearly research-related activities (e.g. AHS Research Day) involving student presentations. The monthly seminars will consist of an admixture of presenters from the University of Manitoba and from outside, with the focus on applied health science issues. Poster and oral presentations will involve directed research projects, research proposals, and applied health sciences issues.

An Advisory Committee will be established for each student within three months of registration into the Ph.D. program. Advisory committees are selected by the advisor/co-advisor in consultation with the student and should consist of individuals whose expertise is consistent with that necessary to provide additional advice and guidance to the student during their program. The advisory committee must consist of a minimum of three (3) members, all of whom must be members of the Faculty of Graduate Studies. Advisory committees may, in addition, include one (1) non-voting guest member who has expertise in a related discipline but is not a member of the Faculty of Graduate Studies.

Students will be expected to complete a candidacy exam, consisting of an oral and written component, normally before the end of the second

year of their program. The student must pass the written and oral phases of the exam to be considered a candidate for the Ph.D. degree. Students must have completed all coursework prior to taking the candidacy exam.

The student's thesis research proposal must be approved by the Advisory Committee normally before the end of the second year after admission to the program. The research proposal, in the form of a document outlining the rationale and background for the study, specific objectives, and methods and procedures will be presented by the candidate in an oral format. Following the oral presentation, the candidate will defend their proposal.

The research program, culminating in the preparation and defense of a doctoral thesis, will be conducted according to the regulations of the Faculty of Graduate Studies of the University of Manitoba.

Expected time to graduation: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
AHS 7000	Research and Practice in Applied Health Sciences	3
Select 9 credit hours from a combination of graduate courses [1]		9
AHS 7002	Seminar I Applied Health Sciences	0
	Hours	**12**
Years 1-2		
AHS 7010	Introductory Research Project in Applied Health Sciences [2]	0-6
	Hours	**0-6**
Year 2		
AHS 7004	Seminar II Applied Health Sciences	0
GRAD 8010	Doctoral Candidacy Examination [3]	0
Thesis Proposal [4]		
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis [5]	0
	Hours	**0**
	Total Hours	**12-18**

1 Nine credit hours may be chosen from a combination of graduate courses from the participating units or from other faculties outside the participating units that offer graduate courses related to applied health sciences (3 credits). Courses must be selected by the student in consultation with the advisor. All courses must be recorded on the "AHS Internal Program Approval Form", and submitted to the AHS Program Assistant for approval by the AHS Program Director.

2 **This course is only for students who were accepted into the program without a research-based Master's degree.**

3 Candidacy Exam:
- normally before the end of the 2nd year after admission
- no later than one year prior to expected graduation date
- course work must be completed

4 Thesis Proposal:
- normally before the end of the 2nd year after admission
- no later than one year prior to expected graduation date
- independent from candidacy exam
- before research begins

5 The candidate will be recommended for the Ph.D. degree upon receipt by the Faculty of Graduate Studies of favourable reports by the thesis examining committee, a corrected copy of the electronic version of the thesis submitted to MSpace, final approval and release forms, and providing all other degree requirements have been satisfied.

Note:

- Regular attendance is expected of all students. Unexcused absence of a total of more than 3 hours of class time (including late arrival and/or early departure from class) may result in the student being required to withdraw from the course or may result in an "F" grade being assigned.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Collaborative PhD

The Collaborative PhD Program at the University of Manitoba is intended to provide an opportunity for outstanding graduate students to receive training at both the University of Manitoba and a collaborating university outside of Canada. Students spend a period in residence and complete portions of their program of study, and fulfill all requirements of, each university. Each of the collaborating universities awards a PhD degree that explicitly notes that the completed program was based on a collaborative PhD program and names the collaborating university (this information will be provided on both the transcript and parchment).

The program is intended to provide students with exposure to research and scholarship at two universities. In this way students receive a more diverse educational experience and have the opportunity to establish a wide network of collaborations. Similarly, faculty members at the University of Manitoba involved in supervising a student engaged in a collaborative PhD program can benefit from establishing or strengthening collaborations with researchers at other institutions.

Outstanding students wishing to benefit from studying both at the University of Manitoba and at a collaborating university are encouraged to apply for admission to the Collaborative PhD Program (such a program is often referred to as a 'cotutelle' for such programs involving a university in France).

Please note this program is only open for Fall admission.

What is a Collaborative PhD Program?

- A program of study and research defined jointly by advisors from the University of Manitoba and a collaborating university
- The student is jointly supervised by the two advisors in conjunction with an advisory committee drawn from the two universities.
- The university at which the student will spend more time in residence is typically designated as the 'Lead' university, and the other university as the 'Partner' university
- The student is required to maintain full-time registration at both the University of Manitoba and the collaborating university and must spend a period of time in residence at both universities (minimally, one year at each).
- The thesis is defended only once at one of the universities with an examining committee comprised of, at minimum, the advisory committee plus an external examiner who has no affiliation to either university and is appointed following the Policies and Procedures of the Lead university.
- A PhD degree is awarded by the University of Manitoba and by the collaborating university. The student receives a parchment from each university, which indicates that the PhD was awarded in conjunction with the collaborating university.

If the University of Manitoba is to Serve as the Lead University

- The student must have been admitted to a PhD program at the University of Manitoba. If not currently enrolled in a PhD program, then the student must apply for admission to a specific unit-based program at the University of Manitoba.
- Following admission, the student must contact the Faculty of Graduate Studies to request entry to a Collaborative program.
- The collaborative program agreement must be defined and presented as part of this request. Completing this agreement will require the student to identify an advisor both at the University of Manitoba and at a collaborating university, and work with both advisors to define a program of study using the template provided.
- Transition to a collaborative program must be completed within a maximum of three years after admission to a PhD program at the University, and before either the thesis proposal is developed or the candidacy examination is written. The collaborating university may also have rules regarding entry to a collaborative program and it is the responsibility of the student to ensure these are met.
- When an approved agreement is in place, the student must collect all appropriate signatures and include the signed agreement with the request. The student must also apply for admission to the collaborating university and in doing so will be required to provide all information required under their application process.
- If admitted to the collaborating university, and an approved collaborative program agreement in place, then the student will be allowed entry to the collaborative PhD program.

If the University of Manitoba is to Serve as the Partner University

- The student must apply for admission to the collaborative PhD Program at the University of Manitoba.
- The collaborative program agreement must be defined and presented as part of the admission application. Completing this agreement will require the student to identify an advisor both at the University of Manitoba and at a collaborating university, and work with both advisors to define a program of study using the template provided. The agreement must include all appropriate signatures.
- Transition to a collaborative program must be completed before either any thesis proposal is developed or any candidacy examination is written. The collaborating university may also have rules regarding entry to a collaborative program and it is the responsibility of the student to ensure these are met.
- If admitted to the University of Manitoba with an approved collaborative program agreement in place, then the student will be admitted to the collaborative PhD program.

Disability Studies, M.A.

Disability Studies
Program Director: Dr. Nancy E. Hansen
Campus Address/General Office: 128 Education Building
Telephone: 204-474-7017
Fax: 204-474-6676
Email Address: disability_studies@umanitoba.ca
Website: umanitoba.ca/explore/programs-of-study/disability-studies-ma-msc (https://umanitoba.ca/explore/programs-of-study/disability-studies-ma-msc/)
Academic Staff: Please refer to the website (https://umanitoba.ca/education/faculty-staff/#educational-administration-foundations-psychology) for current staff listing.

Disability Studies Program Information

The focus of the program allows students to examine the policies and practices of all societies in order to understand the social, rather than the physical or psychological determinants, of the experience of disability. This focus shifts the emphasis from a prevention, treatment, remediation paradigm to a social, cultural, political one.

We offer an interdisciplinary Master's Degree Program in Disability Studies. We also offer a graduate level Option in Disability Studies that is available to both Master's and Doctoral students.

Students in the Master's Program will have the opportunity to apply their undergraduate degrees and work experience to pursue advanced interdisciplinary research and scholarship. Students taking the Option in Disability Studies will complement their major program area of study with course work which analyses the social construction of disability.

OPTION IN DISABILITY STUDIES

The Option in Disability Studies is offered to students in faculties and departments that currently have a graduate program. Upon completion of the requirements, a concentration in Disability Studies will be recorded on the student's transcript. For information concerning the option, interested students are directed to their student advisor or to the Director of Disability Studies.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Disability Studies M.A. Admission Requirements

Graduates of honours or equivalent programs at the University of Manitoba (or equivalent from other recognized universities) with a minimum Grade Point Average (GPA) of 3.0 in the last 60 credit hours, are eligible for direct admission to a course of study leading to the Master of Arts degree. Students who have completed a University of Manitoba Pre-Master's program with a minimum GPA of 3.0 are also eligible for admission. Pre-Master's programs taken at other universities may be accepted.

Students with undergraduate degrees from a wide range of disciplines – such as Architecture, Arts, Education, Human Ecology, Engineering, Law, Management, Medicine, Nursing, Physical Education and Recreation Studies, Rehabilitation Sciences, Science, Social Work and Women's Studies - will be considered eligible to apply if they meet the above requirements.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Disability Studies M.A. program of study (https://umanitoba.ca/explore/programs-of-study/disability-studies-ma-msc/) page.

Degree Requirements

All students in the Disability Studies Program are required to complete 24 credit hours of coursework plus a thesis.

All Students

Course	Title	Hours
DS 7010	Disability Studies	6
DS 7020	History of Disability	3
DS 7030	Evaluation and Application of Research Methods in Disability Studies	3
DS 7040	Selected Topics in Disability Studies	3
Total Hours		**15**

M.A. Students

Course	Title	Hours
Select one external 3 credit hour research methods course		3
Select two 3 credit hour elective courses in the arts and social sciences area, above the 4000 level		6

Expected time to graduate: 2 years

Progression Chart

Course	Title	Hours
Core Courses		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
DS 7010	Disability Studies	6
DS 7020	History of Disability	3
DS 7030	Evaluation and Application of Research Methods in Disability Studies	3
DS 7040	Selected Topics in Disability Studies	3
Electives		
Select two electives in the arts and social sciences area above the 4000 level		6
External Research Methods Course		
Select one 3 credit hour external research methods course in the arts and social sciences area above the 4000 level		3
Thesis		
GRAD 7000	Master's Thesis [1,2]	0
Total Hours		**24**

1. Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.
2. Each student is required to develop a written thesis proposal under the mentorship of his or her Advisor and Advisory Committee. The student's Advisor will give tentative approval of the proposal for presentation to the Advisory Committee. The student must present the proposal orally to the Committee in a closed meeting. At least two weeks prior to the date of the oral presentation, the student will ensure that all members of the Advisory Committee receive the proposal. The Advisory Committee must formally approve the thesis proposal before the student can proceed with the research. Revisions requested by the advisory committee must be completed in a timely manner and be approved by the advisory committee. Research involving human participants or animal subjects requires ethics approval prior to initiation of research.

Option in Disability Studies

The Option in Disability Studies requirements are DS 7010 and either DS 7020 or DS 7030.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Disability Studies, M.Sc.

Disability Studies
Program Director: Dr. Nancy E. Hansen
Campus Address/General Office: 128 Education Building
Telephone: 204-474-7017
Fax: 204-474-6676
Email Address: disability_studies@umanitoba.ca
Website: umanitoba.ca/explore/programs-of-study/disability-studies-ma-msc (https://umanitoba.ca/explore/programs-of-study/disability-studies-ma-msc/)

Academic Staff: Please refer to the website (https://umanitoba.ca/education/faculty-staff/#educational-administration-foundations-psychology) for current staff listing.

Disability Studies Program Information

The focus of the program allows students to examine the policies and practices of all societies in order to understand the social, rather than the physical or psychological determinants, of the experience of disability. This focus shifts the emphasis from a prevention, treatment, remediation paradigm to a social, cultural, political one.

We offer an interdisciplinary Master's Degree Program in Disability Studies. We also offer a graduate level Option in Disability Studies that is available to both Master's and Doctoral students.

Students in the Master's Program will have the opportunity to apply their undergraduate degrees and work experience to pursue advanced interdisciplinary research and scholarship. Students taking the Option in Disability Studies will complement their major program area of study with course work which analyses the social construction of disability.

OPTION IN DISABILITY STUDIES

The Option in Disability Studies is offered to students in faculties and departments that currently have a graduate program. Upon completion of the requirements, a concentration in Disability Studies will be recorded on the student's transcript. For information concerning the option, interested students are directed to their student advisor or to the Director of Disability Studies.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Disability Studies M.Sc. Admission Requirements

Graduates of honours or equivalent programs at the University of Manitoba (or equivalent from other recognized universities) with a minimum Grade Point Average (GPA) of 3.0 in the last 60 credit hours, are eligible for direct admission to a course of study leading to the Master of Science degree. Students who have completed a University of Manitoba Pre-Master's program with a minimum GPA of 3.0 are also eligible for admission. Pre-Master's programs taken at other universities may be accepted.

Students who wish to pursue the M.Sc. are required to have an undergraduate degree in Science.

Students with undergraduate degrees from a wide range of disciplines – such as Architecture, Arts, Education, Human Ecology, Engineering, Law, Management, Medicine, Nursing, Physical Education and Recreation Studies, Rehabilitation Sciences, Science, Social Work and Women's Studies - will be considered eligible to apply if they meet the above requirements.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Disability Studies

M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/disability-studies-ma-msc/) page.

Degree Requirements

All students in the Disability Studies Program are required to complete 24 credit hours of coursework plus a thesis.

All Students

Course	Title	Hours
DS 7010	Disability Studies	6
DS 7020	History of Disability	3
DS 7030	Evaluation and Application of Research Methods in Disability Studies	3
DS 7040	Selected Topics in Disability Studies	3
Total Hours		**15**

M.Sc. Students

Course	Title	Hours
Select one external 3 credit hour research methods course		3
Select two 3 credit hour elective courses in a science based area, above the 4000 level		6

Expected time to graduate: 2 years

Option in Disability Studies

The Option in Disability Studies requirements are DS 7010 and either DS 7020 or DS 7030.

Progression Chart

Course	Title	Hours
Core Courses		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
DS 7010	Disability Studies	6
DS 7020	History of Disability	3
DS 7030	Evaluation and Application of Research Methods in Disability Studies	3
DS 7040	Selected Topics in Disability Studies	3
Electives		
Select two elective courses in a science based area above the 4000 level		6
External Research Methods Course		
Select one 3 credit hour external research methods course in a science based area above the 4000 level		3
Thesis		
GRAD 7000	Master's Thesis [1,2]	0
Total Hours		**24**

1 Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

2 Each student is required to develop a written thesis proposal under the mentorship of his or her Advisor and Advisory Committee. The student's Advisor will give tentative approval of the proposal for presentation to the Advisory Committee. The student must present the proposal orally to the Committee in a closed meeting. At least two weeks prior to the date of the oral presentation, the student will ensure that all members of the Advisory Committee receive the proposal. The Advisory Committee must formally approve the thesis proposal before the student can proceed with the research. Revisions requested by the advisory committee must be completed in a timely manner and be approved by the advisory committee. Research involving human participants or animal subjects requires ethics approval prior to initiation of research.

Registration Information

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Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Individual Interdisciplinary Studies, Master's

The Faculty of Graduate Studies provides the special opportunity to students, with a proven track record, of registering in an Individual Interdisciplinary Studies (IIS) program[1]. Such a program combines substantial aspects of the existing programs of at least two, but no more than four departments/units into a unique program, which lies outside of established department/unit boundaries. Since the Individual Interdisciplinary Studies program places additional demands and responsibilities upon the applicant to assemble an advisory committee, to formulate a research proposal in advance of admission and, to negotiate a program of study with their advisory committee, the eligibility requirements are more stringent than those for discipline based graduate programs.

The regulations presented below and all general regulations of the Faculty of Graduate Studies apply to Individual Interdisciplinary Studies programs. Each department/unit currently offering a discipline-based graduate level program is eligible to offer an Individual Interdisciplinary Studies program[2] in which the subject area of that department/unit is the major focus[3] of the Individual Interdisciplinary Studies program[4]. The department/unit is thus considered the "home" department/unit of the Individual Interdisciplinary Studies student[5]. (Note: the department/unit should be contacted ahead of time to ensure their participation in the Individual Interdisciplinary Studies program).

The "home" department/unit Head (or designate) will ensure that the student and the advisor receive information regarding scholarship, relevant Faculty procedures, and the like (i.e., information that would normally be distributed to department/unit Heads and/or Chairs of graduate programs).

It is anticipated that substantial grounding will be in the major focus area; if not, then justification must be given for consideration.

1 Where the word department/unit appears, the word Faculty or Institute is to be assumed where appropriate.

2 A department /unit's eligibility to offer an Individual Interdisciplinary Studies program is limited to the level of the degree currently being offered by the department/unit. For example, if only a Master's level program is offered by the department/unit, that department/unit is eligible to be the "home" department/unit for students in a Master's level Individual Interdisciplinary Studies program, only. Although this particular department/unit may participate as a supporting department/unit in a Ph.D. level Individual Interdisciplinary Studies program, it is not eligible to be the "home" department/unit of a Ph.D. Individual Interdisciplinary Studies program student. A Faculty member in a department/unit without a graduate program at the level he/she wishes to supervise an Individual Interdisciplinary Studies program student may do so providing that the Faculty member is a member of the Faculty of Graduate Studies and holds an appointment in the "home" department/unit. Note: the supervisor may need to be appointed as an adjunct to the "home" department/unit.

3 "Major Focus" refers to the subject area/discipline of a department/unit in which the credit hours of instruction to be taken are more than or equal to those to be taken in any other participating department/unit. In a two-department/unit combination, assuming a 15 credit hour program, 9 credit hours of course work would be taken in the major focus area, with a minimum of 6 credit hours to be at the 7000 level.

4 The intent of an Individual Interdisciplinary Studies program is to bring together existing discipline-based programs in such a way as to form a unique program tailored to an individual research project and/or study aim that cannot otherwise be accommodated by existing discipline-based programs. Master's programs are used to construct a Master's level Individual Interdisciplinary Studies program and the Ph.D. programs are the building blocks for a Ph.D. level Individual Interdisciplinary Studies program. While there is some flexibility in the actual programs used to construct an Individual Interdisciplinary Studies program, it is imperative that a Master's level Individual Interdisciplinary Studies program contain mostly existing Master's level programs, and Ph.D. programs must make up the majority if not all the component programs in a Ph.D. level Individual Interdisciplinary Studies program.

5 The "home" department/unit counts this student as part of their complement for statistics purposes and would indicate them as "Individual Interdisciplinary Studies program" students.

Degree Requirements

In addition to the minimum program requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 79) of this Calendar, please consult the Faculty of Graduate Studies website (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for Individual Interdisciplinary Studies program supplementary regulations.

All Individual Interdisciplinary Studies Master's program students must complete 12 credit hours of coursework at the 7000 level and successfully complete a Master's thesis. There is no practicum route.

All students must complete the GRAD 7500. Students newly admitted to a graduate program must successfully complete this course within the first term of registration.

All students must complete the GRAD 7300. Students must successfully complete this course within the first year of study or prior to applying to any ethics boards which are appropriate to the student's research.

Expected Time to Graduate: 2 years.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Individual Interdisciplinary Studies, Ph.D.

The Faculty of Graduate Studies provides the special opportunity to students, with a proven track record, of registering in an Individual Interdisciplinary Studies (IIS) program[1]. Such a program combines substantial aspects of the existing programs of at least two, but no more than four departments/units into a unique program, which lies outside of established department/unit boundaries. Since the Individual Interdisciplinary Studies program places additional demands and responsibilities upon the applicant to assemble an advisory committee, to formulate a research proposal in advance of admission and, to negotiate a program of study with their advisory committee, the eligibility requirements are more stringent than those for discipline based graduate programs.

The regulations presented below and all general regulations of the Faculty of Graduate Studies apply to Individual Interdisciplinary Studies programs. Each department/unit currently offering a discipline-based graduate level program is eligible to offer an Individual Interdisciplinary Studies program[2] in which the subject area of that department/unit is the major focus[3] of the Individual Interdisciplinary Studies program[4]. The department/unit is thus considered the "home" department/unit of the Individual Interdisciplinary Studies student[5]. (Note: the department/unit should be contacted ahead of time to ensure their participation in the Individual Interdisciplinary Studies program).

The "home" department/unit Head (or designate) will ensure that the student and the advisor receive information regarding scholarship, relevant Faculty procedures, and the like (i.e., information that would normally be distributed to department/unit Heads and/or Chairs of graduate programs).

It is anticipated that substantial grounding will be in the major focus area; if not, then justification must be given for consideration.

1 Where the word department/unit appears, the word Faculty or Institute is to be assumed where appropriate.

2 A department /unit's eligibility to offer an Individual Interdisciplinary Studies program is limited to the level of the degree currently being offered by the department/unit. For example, if only a Master's level program is offered by the department/unit, that department/unit is eligible to be the "home" department/unit for students in a Master's level Individual Interdisciplinary Studies program, only. Although this particular department/unit may participate as a supporting department/unit in a Ph.D. level Individual Interdisciplinary Studies program, it is not eligible to be the "home" department/unit of a Ph.D. Individual Interdisciplinary Studies program student. A Faculty member in a department/unit without a graduate program at the level he/she wishes to supervise an Individual Interdisciplinary Studies program student may do so providing that the Faculty member is a member of the Faculty of Graduate Studies and holds an appointment in the "home" department/unit. Note: the supervisor may need to be appointed as an adjunct to the "home" department/unit.

3 "Major Focus" refers to the subject area/discipline of a department/unit in which the credit hours of instruction to be taken are more than or equal to those to be taken in any other participating department/unit. In a two-department/unit combination, assuming a 15 credit hour program, 9 credit hours of course work would be taken in the major focus area, with a minimum of 6 credit hours to be at the 7000 level.

4 The intent of an Individual Interdisciplinary Studies program is to bring together existing discipline-based programs in such a way as to form a unique program tailored to an individual research project and/or study aim that cannot otherwise be accommodated by existing discipline-based programs. Master's programs are used to construct a Master's level Individual Interdisciplinary Studies program and the Ph.D. programs are the building blocks for a Ph.D. level Individual Interdisciplinary Studies program. While there is some flexibility in the actual programs used to construct an Individual Interdisciplinary Studies program, it is imperative that a Master's level Individual Interdisciplinary Studies program contain mostly existing Master's level programs, and Ph.D. programs must make up the majority if not all the component programs in a Ph.D. level Individual Interdisciplinary Studies program.

5 The "home" department/unit counts this student as part of their complement for statistics purposes and would indicate them as "Individual Interdisciplinary Studies program" students.

Degree Requirements

In addition to the minimum program requirements of the Faculty of Graduate Studies found in the Graduate Studies Regulations Section (p. 79) of this Calendar, please consult the Faculty of Graduate Studies website (https://umanitoba.ca/graduate-studies/supplementary-

regulations/) for Individual Interdisciplinary Studies program supplementary regulations.

All Individual Interdisciplinary Studies program Doctoral students must complete 12 credit hours of coursework at the 7000 level and successfully complete the Ph.D. Candidacy Exam as well as a Doctoral Thesis.

All students must complete the GRAD 7500. Students newly admitted to a graduate program must successfully complete this course within the first term of registration, unless the course has been completed previously without more than one term span between degrees.

All students must complete the GRAD 7300. Students must successfully complete this course within the first year of study or prior to applying to any ethics boards which are appropriate to the student's research.

Expected Time to Graduate: 4 years.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Peace and Conflict Studies, M.A.

Peace and Conflict Studies
Director: Dr. Adam Muller
Head: Joint MA Program Chair: Dr. A. Muller
Associate Head: Joint MA Program Associate Chair: Dr. E. Sibanda
Program Director: Adam Muller
Campus Address/General Office: 261 St. Paul's College
Telephone: 204-474-8894
Email Address: pacs@umanitoba.ca
Website: umanitoba.ca/st-pauls-college/mauro-institute-peace-justice (https://umanitoba.ca/st-pauls-college/mauro-institute-peace-justice/)
Academic Staff: Please contact pacs@umanitoba.ca for current staff listing.

Peace and Conflict Studies M.A. Program Information

The Joint Master of Arts Program in Peace and Conflict Studies (JMP-PACS) encompasses the analysis and resolution of social conflicts; peace research that examines the structural roots of social conflicts, divisions, and social inequalities; and strategies for building community and promoting social justice. The Program is intended to be rigorous as the significance of research and intervention for conflict resolution, peace-building, and creating a culture of human rights demands a high standard of commitment, scholarship, and professionalism.

Joint Master's Program

The University of Manitoba and The University of Winnipeg together offer the Joint Master's program, with courses and thesis direction (if applicable) offered at both institutions. Students of a JMP are admitted by the Faculty of Graduate Studies at the University of Manitoba. Graduates of Joint Master's programs receive a joint-institution parchment. Students in the JMP may elect to attend the convocation of either of the two participating universities. The programs are governed by the Joint Discipline Committee (JDC) at the department/unit level, consisting of faculty members of both institutions.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Peace and Conflict Studies M.A. Admission Requirements

Applicants require a four-year honours or four-year baccalaureate degree, either: (a) earned in peace and conflict studies, or conflict analysis and resolution; or (b) earned in another related discipline, such as education, law, social work, native studies, political studies, human ecology, human rights, women's studies, and sociology, among others. A high academic standing in previous university work with a minimum Grade Point Average

(GPA) of 3.0 in the last 60 credit hours are eligible for admission to a course of study leading to the Master's degree. However, PACS is a highly selective graduate program and applicants should be advised that in order to be competitive for admission, possession of a GPA much higher than the minimum required is strongly recommended.

Appropriate research capability, typically demonstrated by authorship of a major research paper, for example, a senior undergraduate term paper, or thesis, or an article in a refereed publication. Applicants will also have a proficiency in the English language at levels required by the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Peace and Conflict Studies M.A. program of study (https://umanitoba.ca/explore/programs-of-study/peace-and-conflict-studies-ma/) page.

Degree Requirements

The Joint M.A. Program in Peace and Conflict Studies has the following requirements:

Thesis Option: Twelve credit hours of core courses*; three credit hours in research methods; three credit hours in a PACS elective or PACS practicum; a thesis proposal and defence, and a thesis examination. The research methods and PACS electives can be taken from a list of PACS approved courses at the 7000 level.

or

Comprehensive Exam Option*:* twelve credit hours of core courses*; three credit hours in research methods; three credit hours in practicum; twelve credit hours of PACS electives; and a comprehensive examination. The research methods, and PACS electives can be taken from a list of approved courses at the 7000 level.

After the completion of 9 credit hours of coursework within the Program, the student must apply for consideration within either the Thesis route or the Comprehensive Exam route.

Expected Time to Graduate: 2 years

Progression Chart

Thesis Route

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PEAC 7010	Interpersonal Communication, Problem-Solving, and Trust-building	3
PEAC 7020	Theories of Conflict and Conflict Resolution	3
PEAC 7110	International Human Rights and Human Security	3
PEAC 7120	Peacebuilding and Social Justice	3
PEAC XXXX	PACS Elective Course	3
PEAC 7070	Special Topics in Peace and Conflict Studies 2 [1]	3
	Hours	**18**
Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**18**

1. Either a PACS research methods course or a research methods course offered by another program (with approval of advisor).
2.
   - Students are expected to produce a thesis proposal subject to a public oral defence.
   - If applicable, Students must obtain approval from the Research Ethics Board (REB), prior to obtaining research.
   - Students must successfully submit and defend their final version of the Thesis.

Comprehensive Exam Route

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PEAC 7010	Interpersonal Communication, Problem-Solving, and Trust-building	3
PEAC 7020	Theories of Conflict and Conflict Resolution	3
PEAC 7110	International Human Rights and Human Security	3
PEAC 7120	Peacebuilding and Social Justice	3
PEAC XXXX	PACS Elective Courses	6
	Hours	**18**
Year 2		
PEAC XXXX	PACS Elective Courses	6
PEAC 7500	Practicum	3
PEAC 7070	Special Topics in Peace and Conflict Studies 2 [1]	3
GRAD 7010	Comprehensive Examination [2]	0
	Hours	**12**
	Total Hours	**30**

1. Either a PACS research methods course or a research methods course offered by another program (with approval of advisor).
2. Students must successfully write and defend their Comprehensive Examination.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registering, all students (new and returning) must meet with their program advisor to select and receive approval for courses to be taken. Any course revisions (additions and/or withdrawals) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Peace and Conflict Studies, Ph.D.

Peace and Conflict Studies
Director: Dr. Adam Muller
Head: PhD Program: Dr. Adam Muller
Associate Head: PhD Program: N/A
Program Director: Adam Muller
Campus Address/General Office: 261 St. Paul's College
Telephone: 204-474-8894
Email Address: pacs@umanitoba.ca
Website: umanitoba.ca/st-pauls-college/mauro-institute-peace-justice (https://umanitoba.ca/st-pauls-college/mauro-institute-peace-justice/)
Academic Staff: Please contact pacs@umanitoba.ca for current staff listing.

Peace and Conflict Studies Ph.D. Program Information

The Ph.D. Program in Peace and Conflict Studies provides an interdisciplinary approach to analyze and resolve social conflicts through innovative peace research that examines the structural roots of social conflicts, divisions, and inequalities, and strategies for building community and promoting social justice and human rights.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Peace and Conflict Studies Ph.D. Admission Requirements

Applicants require a Master's degree in Peace and Conflict Studies (or equivalent from other recognized universities) with a minimum Grade Point Average (GPA) of 3.0 in the last 60 credit hours. However, PACS is a highly selective graduate program and applicants should be advised that in order to be competitive for admission, possession of a GPA much higher than the minimum required is strongly recommended.

Graduates of a Master's degree in diverse disciplines at the University of Manitoba (or equivalent from other recognized universities) are also eligible for admission to the program pending successful completion of prerequisite courses to ground them in the field. Applicants will have a thesis-based master's degree, either earned in peace and conflict studies or a related discipline such as social work, education, or sociology, among others. In the event a Master's degree is not thesis-based, research capability may be demonstrated by a major research paper from a recognized institution, or an independently completed research article published in a refereed journal.

Applicants will also have a proficiency in the English language at levels required by the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Peace and Conflict Studies Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/peace-and-conflict-studies-phd/) page.

Degree Requirements

The Ph.D. Degree in Peace and Conflict Studies requirements are 24 credit hours; twelve credits of required course work at the 7000 level; six credit hours in a cognate area and 6 credits in research methods, plus a candidacy examination, a thesis proposal, and a thesis. The six credit hours of cognate and research method courses can be taken from a list of approved courses at the 7000 level.

Students whose Master's degree is not in Peace and Conflict Studies will normally be required to take two prerequisite courses in the field as occasional courses. Note that there are additional tuition and fees for the two occasional courses.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PEAC 7030	International Conflict Resolution and Peace-building	3

PEAC 7050	Intercultural Conflict Resolution and Peace-Building	3
PEAC 7060	Special Topics in Peace and Conflict Studies 1 (Topics will vary)	3
PEAC 7060	Special Topics in Peace and Conflict Studies 1	3
PEAC 7070	Special Topics in Peace and Conflict Studies 2 (Topics will vary) [1]	3
PEAC 7070	Special Topics in Peace and Conflict Studies 2	3
	Hours	**18**
Year 2		
Select two Cognate Area Courses [2]		6
GRAD 8010	Doctoral Candidacy Examination [3]	0
	Hours	**6**
Year 3		
GRAD 8000	Doctoral Thesis [4]	0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis [5]	0
	Hours	**0**
	Total Hours	**24**

1. Either a PACS research methods course or a research methods course offered by another program (with approval of advisor)
2. Courses to support the student's research, usually offered in another department (or in PACS with Director approval). Courses must have approval of advisor.
3. Students must write and defend a PhD Candidacy Examination.
4. Students are expected to produce a thesis proposal subject to a public oral defence.
   If applicable, Students must obtain approval from the Research Ethics Board (REB), prior to conducting research.
5. Students must successfully submit and defend their final version of the Thesis.

Note: For students without a background in PACS, additional courses may be required.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registering, all students (new and returning) must meet with their program advisor to select and receive approval for courses to be taken.

Any course revisions (additions and/or withdrawals) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Faculty of Kinesiology and Recreation Management

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Kinesiology and Recreation Management, M.A. / M.Sc. (p. 247)	2	12	

Kinesiology and Recreation Management, M.A. / M.Sc.

Kinesiology and Recreation Management

Dean: Dr. Douglas Brown
Associate Dean(s): Dr. Leisha Strachan (Research and Graduate Studies)
Campus Address/General Office: 203 Active Living Centre
Telephone: 204-474-7806

Email Address: fkrm (fkrmgrad@umanitoba.ca)g (kinrecgrad@umanitoba.ca)rad@umanitoba.ca (fkrmgrad@umanitoba.ca)
Website: umanitoba.ca/kinesiology-recreation-management/ (https://umanitoba.ca/kinesiology-recreation-management/)
Academic Staff: Please see the Kinesiology and Recreation Management website (https://umanitoba.ca/kinesiology-recreation-management/research/research-themes/#our-researchers) for Faculty information.

Kinesiology and Recreation Management Program Information

The Master of Science (Kinesiology and Recreation) or Master of Arts (Kinesiology and Recreation) provides advanced education and research training within sub-disciplines including kinesiology, physical education, health, human performance, recreation, leisure, and tourism studies.

Resources and supports for M.Sc. related research are jointly provided by the Faculty of Kinesiology and Recreation Management and the Health, Leisure and Human Performance Research Institute.

The Faculty of Kinesiology and Recreation Management and the College of Rehabilitation Sciences, offer a multi-unit Ph.D. in Applied Health Sciences (p. 236).

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Kinesiology and Recreation Management Admission Requirements

Students require:

- The completion of a four-year Kinesiology (BKIN)/Physical Education (BPE) or Recreation Management and Community Development (BRMCD) degree, or equivalent,
  Or
- Completion of a four-year undergraduate degree other than a BKIN/BPE or BRMCD, or equivalent, with a suitable academic background in the area of study,
  Or
- Completion of a Pre-Masters program at the University of Manitoba, or equivalent.

Note: The degree designation (M.Sc. or M.A.) will be determined by the Admissions Committee, in consultation with the Advisor, and will consider the coursework and research to be undertaken.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Kinesiology and Recreation Management M.A./M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/kinesiology-and-recreation-management-ma-msc/) page.

Degree Requirements

Students must:

- Complete a minimum of 12 credit hours of course work approved by the faculty advisor. Of these 12 credit hours, a minimum of nine credit hours must be at or above the 7000 level; a minimum of six credit hours must be selected from the 7000 level course offerings in Kinesiology and Recreation Management with KPER 7000 being compulsory; and
- Enter the program with, or complete as part of the approved program of study, a minimum of six credit hours in research methods and/or statistics. If the research methods and/or statistics requirement is completed as part of the approved program of study, it must be at or above the 3000 level. The required course, KPER 7000, may be accepted for credit towards this requirement.
- Within their program of study, students may complete a maximum of two KPER 7800 (different topics) for a total of six credit hours; however, only three credit hours will count towards the minimum 12 credit hour coursework requirement

In addition to coursework requirements, a student must engage in research and scholarship leading to the completion of a thesis, and attend a minimum of one professional development event per term enrolled as a graduate student in the program until the program is completed (i.e. students must complete this requirement once per term for the **Fall** (September-December) **Winter** (January-April) and **Summer** (May-August term)

Note: After participating in a specific professional development training event, the student is required to document their participation (i.e., the student will create a report that provides specific information about the event as well as written reflection about how the knowledge gained through the event will enable them to improve and increase their capabilities). Progress is monitored by the Graduate Program Coordinator and is the requirement for graduation.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**0**
Years 1-2		
Select a minimum of 9 credit hours at or above the 7000 level [1]		9
KPER 7000	Research in Kinesiology and Recreation Studies	3
	Hours	**12**

Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**12**

1 A minimum of six (6) credit hours must be taken from the 7000 level course offerings in Kinesiology and Recreation Management of which KPER 7000 is compulsory.

2 In addition to coursework requirements, a student must engage in research and scholarship leading to the completion of a thesis. Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Program Approval Form

All new students must complete a Graduate Program Approval Form, in consultation with their advisor, and submitted to the Graduate Program Chair, prior to registering for courses. Only courses that are included on the Program Approval Form will be credited to the student's program of study. The Advisor and Graduate Program Chair must approve any changes made to the Program of Study.

Directed Study

Students may complete a maximum of two directed study courses (different topics) for a total of six credit hours; however, only one directed study (three credits) will count towards the minimum 12 credit hour course degree requirements. Students, in conjunction with the advisor for the course, must complete a Directed/Individual Study form. This form must include a description of the course work to be completed and an outline of how the final grade will be determined. This form must be approved by the Graduate Program Chair and filed with the Graduate Program Assistant who will register the student for the course.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Faculty of Law

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Human Rights, M.H.R. (p. 249)	2	18	
Laws, LL.M. (p. 251)	2	6-8	

Human Rights, M.H.R.

Human Rights
Program Director: Dr. Kjell Anderson
Campus Address/General Office: 303 Robson Hall
Telephone: 204-480-1485
Email Address: mhradmissions@umanitoba.ca
Website: umanitoba.ca/law/programs-of-study#graduate-programs (https://umanitoba.ca/law/programs-of-study/#graduate-programs)

Academic Staff: Please refer to the Law website (https://umanitoba.ca/law/faculty-staff/) for current staff listing.

Human Rights Program Information

The department offers an interdisciplinary program leading to the Master of Human Rights degree.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.H.R. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.H.R. program of study (https://umanitoba.ca/explore/programs-of-study/master-human-rights-mhr/) page.

Degree Requirements

Students must complete 18 course credits, and either a practicum and a major research project, or a thesis.

Second Language Reading Requirement: MHR students whose original language is English are required to demonstrate working knowledge of a second language by the time of graduation.

Expected Time to Graduate: 16-24 months

Progression Chart

Thesis Stream

Course	Title	Hours
Year 1		
HMRT 7100	Theory and Practice of Human Rights: Critical Perspectives	3
HMRT 7200	Selected Topics in Human Rights Research and Methods	3
HMRT 7300	Human Rights Law	3
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
Electives	Other approved credits	9
	Hours	**18**
Summer		
GRAD 7000	Master's Thesis (or finish coursework)	0
	Hours	**0**
Year 2		
Summer		
GRAD 7000	Master's Thesis (Fall and possible Winter and Summer terms)	0
	Hours	**0**
	Total Hours	**18**

Practicum Stream

Course	Title	Hours
Year 1		
HMRT 7100	Theory and Practice of Human Rights: Critical Perspectives	3
HMRT 7200	Selected Topics in Human Rights Research and Methods	3
HMRT 7300	Human Rights Law	3
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
Electives	Other approved credits	9
	Hours	**18**
Summer		
GRAD 7030	Master's Practicum	0
	Hours	**0**
Year 2		
Summer		
GRAD 7030	Master's Practicum (Fall or Winter term)	0
	Hours	**0**
	Total Hours	**18**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Laws, LL.M.

Associate Dean(s): Donn Short (Graduate Studies)
Campus Address/General Office: 452 Robson Hall
Telephone: 204-480-1485
Email Address: lawgrad@umanitoba.ca
Website: http://law.robsonhall.com/
Academic Staff: Please refer to the Law website (http://law.robsonhall.com/faculty-staff/) for current staff listing.

Law Program Information

The Faculty offers a structured and personal Master of Laws degree.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

LL.M. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

In addition, candidates must show that they are equipped intellectually to engage in advanced legal study and research. The Faculty of Law anticipates that the prospective LL.M. student will have earned the J.D., LL.B. or equivalent degree in law with a first or high upper second B+ standing. Applicants ordinarily hold a common law or Canadian civil law degree but applications from those whose legal education has been in another legal system will be given full consideration.

Applicants without a JD/LLB degree will possess demonstrable legal or other applicable knowledge obtained through study within another relevant undergraduate or graduate degree.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the LL.M. program of study (https://umanitoba.ca/explore/programs-of-study/master-laws-llm/) page.

Degree Requirements

Students must complete two courses, one of which must be in the Faculty of Law, as well as the Graduate Legal Research and Theory seminar LAW 7112. A minimum grade of B must be obtained in each course.

In addition to course work, the student must complete a thesis of 90 to 120 pages. Each student is assigned a faculty advisor with expertise in the chosen area of study who will direct thesis research and design and assist the student in course selection. Early and regular contact with the advisor is recommended.

Expected Time to Graduate: 1 - 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
LAW 7112	Graduate Legal Research and Theory	3
Select two additional courses from the following: [1]		4-6
LAW XXXX	LAW Course	
COURSE XXXX	LAW Course or a Course outside the Faculty of Law	
	Hours	**7-9**
Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**7-9**

1. Students must complete two additional courses relevant to their research area. One of these courses may be taken outside the Faculty of Law. Course selection must be approved by the student's supervisor.
2. Thesis must be complete by July 1 to enable timely review before the Faculty of Graduate Studies' deadline at the end of August.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

If you have questions about registration, please email lawgrad@umanitoba.ca.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Note: Law requires a minimum grade point average of 3.0 with **no grade below B**. A C+ is the equivalent of a failing grade.

Faculty of Science

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biological Sciences, M.Sc. (p. 252)	2	6	
Biological Sciences, Ph.D. (p. 253)	4	6-12	
Chemistry, M.Sc. (p. 254)	2	9	
Chemistry, Ph.D. (p. 256)	4	9-15	
Computer Science, M.Sc. (p. 257)	2	15	
Computer Science, Ph.D. (p. 258)	4	12	
Mathematics, M.Sc. (p. 259)	2	15	
Mathematics, Ph.D. (p. 261)	4		
Microbiology, M.Sc. (p. 262)	2-3	6	
Microbiology, Ph.D. (p. 263)	4-6	12	
Physics and Astronomy, M.Sc. (p. 264)	2	12-36	
Physics and Astronomy, Ph.D. (p. 266)	4	12-24	
Statistics, M.Sc. (p. 268)	1-2	15-24	
Statistics, Ph.D. (p. 269)	5	12	

Biological Sciences, M.Sc.

Biological Sciences
Head: Dr. Gary Anderson
Campus Address/General Office: 212 Biological Sciences Building
Telephone: 204-474-9245
Fax: 204-474-7604
Email Address: biograd@umanitoba.ca
Website: umanitoba.ca/science/biological-sciences (https://umanitoba.ca/science/biological-sciences/)

Biological Sciences Program Information

The department offers graduate training leading to Master of Science and Doctor of Philosophy degrees in a broad range of biological disciplines in both field and laboratory research.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Biological Sciences M.Sc. Admission Requirements

Applicants are required to have a 4-year undergraduate degree in Biology (or equivalent). If a student applies with a three-year general B.Sc. degree or equivalent, a pre-Master's program must be taken which will be individually prescribed.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biological Sciences M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/biological-sciences-msc/) page.

Degree Requirements

The program requires completion of a research thesis and coursework consisting of a minimum of one core course and one additional BIOL 7000 course. Study and research will extend to a minimum of twelve months. All students must submit a research-based thesis and defend it orally.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOL 7100	Core Skills in Biological Sciences Research	3
BIOL 7XXX	Major subject at 7000 level	3
	Hours	**6**
Year 2		
GRAD 7020	Master's Re-registration	0
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**6**

Note:

- Students are also required to submit a MSc proposal to their advisory committee within the first 6 months of their program. In addition, a progress report meeting must be held yearly to track progress in the program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Biological Sciences, Ph.D.

Biological Sciences
Head: Dr. Gary Anderson
Campus Address/General Office: 212 Biological Sciences Building
Telephone: 204-474-9245
Fax: 204-474-7604
Email Address: biograd@umanitoba.ca
Website: umanitoba.ca/science/biological-sciences (https://umanitoba.ca/science/biological-sciences/)

Biological Sciences Program Information

The department offers graduate training leading to Master of Science and Doctor of Philosophy degrees in a broad range of biological disciplines in both field and laboratory research.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Biological Sciences Ph.D. Admission Requirements

Applicants are required to have a Master's degree in Biology (or equivalent). Candidates normally have completed a M.Sc. degree before entering the Ph.D. program; however under certain circumstances transfer from a M.Sc. to Ph.D. program and entry into the Ph.D. without a M.Sc. is possible. Individual qualifications other than these will be considered.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biological Sciences Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/biological-sciences-phd/) page.

Degree Requirements

Admission to the Ph.D. from a Master's Degree: a minimum of six credit hours of graded course work at the 7000 level (including the core course BIOL 7220: Critical Thinking in Biological Sciences), and a thesis are required.

Admission to the Ph.D. from an Honours Bachelor's Degree or equivalent: a minimum of 12 credit hours of graded course work at the 7000 level (including two core courses, BIOL 7100: Core Skills in Biological Sciences

Research and BIOL 7220: Critical Thinking in Biological Sciences), and a thesis are required.

Upon recommendation by the Advisory Committee, the student may be required to take additional coursework beyond the minimum requirement.

Expected Time to Graduate: 3 - 4 years

Progression Chart

Where admission is directly from Master's[1]:

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOL 7220	Critical Thinking in Biological Sciences	3
BIOL 7XXX	Major subject at 7000 level	3
	Hours	**6**
Year 2		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Year 3		
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
Year 4		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**6**

1 Where admission to the Ph.D. is directly from a Master's Degree, a minimum of six (6) credit hours of graded course work at the 7000 level (including the core course BIOL 7220), and a thesis are required.

Where admission is directly from an Honours Bachelor's Degree or equivalent[1]:

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BIOL 7100	Core Skills in Biological Sciences Research	3
BIOL 7220	Critical Thinking in Biological Sciences	3
BIOL 7XXX	Major subject at 7000 level	6
	Hours	**12**
Year 2		
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Year 3		
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
Year 4		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

1 Where admission to the Ph.D. is directly from an Honours Bachelor's Degree or equivalent, a minimum of 12 credit hours of graded course work at the 7000 level (including two core courses, BIOL 7100 and BIOL 7220), and a thesis are required.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Chemistry, M.Sc.

Chemistry
Head: Ute Kothe

Campus Address/General Office: 360 Parker Building
Telephone: 204-474-9321
Fax: 204-474-7608
Email Address: Chemistry_Dept@umanitoba.ca
Website: umanitoba.ca/science/chemistry (https://umanitoba.ca/science/chemistry/)
Academic Staff: Please refer to Chemistry website (https://umanitoba.ca/science/directory/chemistry/) for Faculty information.

Chemistry Program Information

A Master of Science or Doctor of Philosophy in the chemical sciences provides a gateway to an exciting, challenging and frequently high-paying career.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Chemistry M.Sc. Admission Requirements

Applicant must have a degree in Chemistry, Biochemistry or a related field.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Chemistry M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/chemistry-msc/) page.

Degree Requirements

Program Requirements

A minimum of 9 credit hours of course work at the 7000 level, including CHEM 7900, are required. These courses will normally be in Chemistry, but in special circumstances the advisory committee may conclude a course in a different field would be more appropriate. Students are expected to complete the M.Sc. program and pass the oral defence of their thesis within two years.

Attendance at departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

Colloquium: A weekly colloquium is given by members of staff or external invited lecturers. All graduate students are expected to attend the colloquia.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ACS Placement Test [1]		0
CHEM 7900	Seminar in Current Research Issues in Chemistry	3
COURSE 7XXX	Two courses at the 7000 level	6
GRAD 7000	Master's Thesis [2]	0
Department Seminars/Colloquia [3]		0
	Hours	**9**
Year 2		
GRAD 7000	Master's Thesis [4]	0
Department Seminars/Colloquia [3]		
	Hours	**0**
	Total Hours	**9**

1. Administered by the department, this placement test written in your chosen sub-discipline (e.g., Analytical, Biochemistry, Inorganic...) will help orient your course selection.
2. The thesis proposal should be submitted to the advisory committee before the end of the student's first year in the graduate program.
3. Attendance at departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.
4. The oral thesis defense should take place near the end of the student's second year in the program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and new graduate students in the Department of Chemistry must complete a Graduate Program Approval form and consult with the Academic Programs Administrator. The selection of courses and changes in a student's program must be initiated by their graduate advisor in the case of Masters students or their advisory committee in the case of doctoral students. Students should consult the Academic Programs Administrator.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Chemistry, Ph.D.

Chemistry
Head: Ute Kothe
Campus Address/General Office: 360 Parker Building
Telephone: 204-474-9321
Fax: 204-474-7608
Email Address: Chemistry_Dept@umanitoba.ca
Website: umanitoba.ca/science/chemistry (https://umanitoba.ca/science/chemistry/)
Academic Staff: Please refer to Chemistry website (https://umanitoba.ca/science/directory/chemistry/) for Faculty information.

Chemistry Program Information

A Master of Science or Doctor of Philosophy in the chemical sciences provides a gateway to an exciting, challenging and frequently high-paying career.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Chemistry Ph.D. Admission Requirements

Normally, only students holding thesis-based M.Sc. degrees will be admitted directly into the Ph.D. program. Other students will be admitted as M.Sc. candidates, with the option to transfer into the Ph.D. program after one year of satisfactory studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Chemistry Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/chemistry-phd/) page.

Degree Requirements

For students entering the Ph.D. program directly from a B.Sc., a minimum of 15 credit hours of course work at the 7000 level, including CHEM 7900, are required.

For students entering the Ph.D. program with a recognized M.Sc. degree, students must complete CHEM 7900 if they have not already done so at an earlier stage, and an additional 6 credit hours of course work at the 7000 level.

Additional courses (undergraduate or graduate level) may be recommended by the advisory committee to make up for specific deficiencies in preparation of a specific student for a specific research topic. These courses will be designated as "O" on the PhD Program of Study Form. Fees will be assessed but they will not count towards the total degree credit hours.

Attendance at departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

Colloquium: A weekly colloquium is given by members of staff or external invited lecturers. All graduate students and fourth-year Honours students are expected to attend the colloquia.

Expected Time to Graduate: 4-5 years (from 4 year B.Sc.); 3 years (from M.Sc.).

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ACS Placement Test [1]		0
CHEM 7900	Seminar in Current Research Issues in Chemistry [2]	3
COURSE 7XXX	Two to four additional courses at the 7000 level [3]	6-12
GRAD 8000	Doctoral Thesis [4]	0
Department Seminars/Colloquia [5]		0
	Hours	**9-15**
Year 2		
GRAD 8010	Doctoral Candidacy Examination [6]	0
Department Seminars/Colloquia [5]		0
	Hours	**0**
Year 3		
Colloquium (departmental) seminar [7]		0
Department Seminars/Colloquia [5]		0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis [8]	0
Department Seminars/Colloquia [5]		0
	Hours	**0**
	Total Hours	**9-15**

1 Administered by the department, this placement test written in the chosen sub-discipline (e.g., Analytical, Biochemistry, Inorganic…) will help orient the student's course selection.

2 Does not need to be re-taken if completed in the MSc stream.

3
- **For direct entry or transfer from U of M Chemistry MSc stream holding a recognized MSc degree:** Two additional courses at the 7000 level
- **For direct entry or transfer without a recognized MSc degree:** Four additional courses at the 7000 level

4 Submitted to the advisory committee before the end of the student's first year in the graduate program.

5 Attendance at all departmental seminars is mandatory throughout the graduate program, and will be enforced by the advisor.

6 The candidacy examination will normally be held near the end of the student's second year in the graduate program.

7 Before the end of the third year, a candidate must present a 45 – 50 minute seminar to the Department on the background to and results of their own research. Scheduled by the Department Seminar Coordinator.

8 The oral thesis defence should take place near the end of the student's fourth year in the program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All returning and new graduate students in the Department of Chemistry must complete a Graduate Program Approval form and consult with the Academic Programs Administrator. The selection of courses and changes in a student's program must be initiated by their graduate advisor in the case of Masters students or their advisory committee in the case of doctoral students. Students should consult the Academic Programs Administrator.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Computer Science, M.Sc.

Computer Science
Head: Dr. David Gerhard
Associate Head (Graduate) / Grad Chair: Dr. Andrea Bunt
Program Advisor:
Campus Address/General Office: E2-445 EITC
Telephone: 204-474-8313
Fax: 204-474-7609
Email Address: queries@cs.umanitoba.ca
Website: umanitoba.ca/science/computer-science (https://umanitoba.ca/science/computer-science/)
Academic Staff: Please refer to Computer Science website (https://umanitoba.ca/science/directory/computer-science/) for Faculty information.

Computer Science Program Information

The department offers Master's and Doctoral programs at the graduate level, which cover many areas of computer science.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Computer Science M.Sc. Admission Requirements

Students may be admitted to the Master's program if they hold an Honours Bachelor's degree in Computer Science and if they present a suitable selection of courses. Admission is not guaranteed and each application will be individually considered by the department's Graduate Studies Committee.

Students can also be admitted to the Master's program upon successful completion of their pre-Master's program.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Computer Science M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/computer-science-msc/) page.

Degree Requirements

Students must complete 15 credit hours of coursework and a thesis. All credit hours must be at the 7000 level and must include the 3 credit hour Research Methodologies course.

Students must consult with their departmental advisor prior to deciding on courses. Listed courses will not all be offered in any one particular year.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
COMP 7210	Research Methodologies	3
COMP 7XXX	Computer Science Courses [1]	9
COURSE XXXX	GRAD/Approved Course [2]	3
	Hours	**15**
Year 2		
GRAD 7000	Master's Thesis [3]	0
	Hours	**0**
	Total Hours	**15**

1. Including courses in at least two of the three areas (Theory, Applications, and Systems).
2. Can be a graduate course in Computer Science or an approved course from a different department.
3. Every thesis M.Sc. student must, in consultation with his or her advisor, choose one of two options to get their thesis proposal approved within the first twelve months in the MSc. Program. They can either (i) write and submit a formal thesis proposal to their advisory committee members; or (ii) present their proposal to their advisory committee members in a formal, scheduled meeting.

Note:

- The advisory committee must be appointed within eight months of the start of the student's program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and email their registration request for approval to the graduate program advisor. Any changes, after the initial registration, must also be approved by the advisor.

A listing of available courses can be picked up at the departmental general office. Courses are subject to cancellation if there is insufficient enrolment.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Computer Science, Ph.D.

Computer Science
Head: Dr. David Gerhard
Associate Head (Graduate) / Grad Chair: Dr. Andrea Bunt
Program Advisor:
Campus Address/General Office: E2-445 EITC
Telephone: 204-474-8313
Fax: 204-474-7609
Email Address: queries@cs.umanitoba.ca
Website: umanitoba.ca/science/computer-science (https://umanitoba.ca/science/computer-science/)
Academic Staff: Please refer to Computer Science website (https://umanitoba.ca/science/directory/computer-science/) for Faculty information.

Computer Science Program Information

The department offers Master's and Doctoral programs at the graduate level, which cover many areas of computer science.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Computer Science Ph.D. Admission Requirements

A candidate must normally complete an M.Sc. degree before entering the Ph.D. program. Individual qualifications other than this will be considered.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Computer Science Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/computer-science-phd/) page.

Degree Requirements

Students must complete a minimum of 12 credit hours of coursework and a thesis. All credit hours must be at the 7000 level. Students must consult with their departmental advisor prior to deciding on courses. Courses listed will not all be offered in any one particular year.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
COMP 7XXX	Computer Science Courses [1]	9
COURSE 7XXX	GRAD/Approved Course [2]	3
	Hours	**12**
Year 2		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

1. At least one course in each of the three areas (Theory, Applications, and Systems).
2. Any graduate course in Computer Science or any graduate course from another department included on the list of approved graduate courses.

Note:

- The student is expected to complete the course requirements during the first 24 months of the PhD program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration and email their registration request for approval to the graduate program advisor. Any changes, after the initial registration, must also be approved by the advisor.

A listing of available courses can be picked up at the departmental general office. Courses are subject to cancellation if there is insufficient enrolment.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Mathematics, M.Sc.

Mathematics
Head: Dr. Shaun Lui
Campus Address/General Office: 420A Machray Hall
Telephone: 204-474-9693
Email Address: mathdept@umanitoba.ca

Website: umanitoba.ca/science/mathematics (https://umanitoba.ca/science/mathematics/)
Academic Staff: Please refer to the Mathematics website (https://umanitoba.ca/science/directory/mathematics/) for current staff listing.

Mathematics Program Information

The department offers programs leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Mathematics M.Sc. Admission Requirements

Students should generally have a strong background in Mathematics with courses leading to an Honours or four-year Major in Mathematics in a B.Sc., B.A., or equivalent degree. The department's Graduate Studies Committee will evaluate the student's background. Admission to the program will be based on this evaluation.

Students with other degrees or backgrounds may be eligible for admission to a pre-Master's program to the satisfaction of the department. Courses will be prescribed on an individual basis to help the student qualify for graduate work in Mathematics.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mathematics M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/mathematics-msc/) page.

Degree Requirements

Thesis Route: Students are required to complete at least 15 credit hours of course work, of which at least 9 credit hours must be from courses designated MATH 7000 or above and at least 6 credit hours in an area of mathematical sciences clearly different from the area of specialization of the thesis (as approved by the Department Head or designate). Each student in the thesis-based M.Sc. program must write a thesis.

Coursework Route: Students are required to complete at least 24 credit hours of course work at the 3000/7000/8000 level. At most 6 credit hours can be at the 3000 level. 4000 level courses do not count toward the degree requirement. Courses outside the Department of Mathematics (at most 9 credit hours) are also possible, subject to approval by the Department Head or designate. At least 6 credit hours must be in an area of mathematical sciences clearly different from the area of specialization of the report (see below). The minimum GPA of all courses must be at least 3.25.

Certain programs of study within mathematics may require courses outside the Department of Mathematics. A student may take at most two 3 credit hour reading courses from any one instructor for credit in this degree program.

Every M.Sc. student must make one 50-min presentation in any of the seminar series approved by the Department.

Expected Time to Graduate: 2 years

Progression Chart

THESIS PROGRAM

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MATH 7XXX	Courses designated MATH 7000 or above	9
Select two courses in an area of mathematical sciences		6
	Hours	**15**
Year 2		
GRAD 7000	Master's Thesis [1,2]	0
	Hours	**0**
	Total Hours	**15**

1 Students must demonstrate their mastery of the field and that they are fully conversant with the relevant literature through their thesis/practicum.

2 The M.Sc. thesis proposal must include a literature review, description of the proposed work, and a schedule for completion. The proposal should normally be completed within 10 months following the start of the program and must be approved by the student's advisor.

Coursework Program

Course	Title	Hours
Years 1-2		
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
MATH XXXX	Courses designated MATH 3000/4000/7000 or above [1]	12
Select two courses in the area of mathematical sciences		6
MATH 8996 or MATH 8998	MSc project 1 (A project, or work done in industry, together with a report OR report on teaching an undergraduate course.) or MSc project 2	6
	Hours	**24**
	Total Hours	**24**

1 At most 6 credit hours can be at the 3000 level. 4000 level courses do not count toward the degree requirement. Courses outside the Department of Mathematics (at most 9 credit hours) are also possible, subject to approval.

Notes:

- Certain programs of study within mathematics may require courses outside the Department of Mathematics.
- A student may take at most two 3 credit hour reading courses from any one instructor for credit in this degree program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to consult with a department advisor prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Mathematics, Ph.D.

Mathematics
Head: Dr. Shaun Lui
Campus Address/General Office: 420A Machray Hall
Telephone: 204-474-9693
Email Address: mathdept@umanitoba.ca
Website: umanitoba.ca/science/mathematics (https://umanitoba.ca/science/mathematics/)
Academic Staff: Please refer to the Mathematics website (https://umanitoba.ca/science/directory/mathematics/) for current staff listing.

Mathematics Program Information

The department offers programs leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Mathematics Ph.D. Admission Requirements

Students entering the Ph.D. program must have either an Honours degree or a M.Sc. degree in Mathematics.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mathematics Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/mathematics-phd/) page.

Degree Requirements

All course work must be approved by the advisor and the Associate Head (Graduate Studies). A student may take at most two 3 credit hour reading courses from any one instructor for credit in this degree program. Particular programs of study within mathematics may require courses outside the Department of Mathematics.

In addition to the course work, the student is required to take a candidacy examination, which will consist of two comprehensive exams from the following areas: Algebra, Analysis, Combinatorics, Differential Equations, Computational Mathematics, Topology, at least one of which must be Algebra or Analysis. The candidate's supervisor must approve the choice of subjects.

To proceed to a Ph.D. degree a student must have a grade of "A" on each of the three parts.

All Ph.D. students are required to serve as instructors in at least two one-semester undergraduate courses (two 3 credit hour courses or one 6 credit hour course) after passing all comprehensive examinations. The Department Head may require a student to complete additional training before any teaching duties are assigned to them.

Every Ph.D. student must make two 50-min presentations in any of the seminar series approved by the Department.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
Courses at the 7000 level or higher [1]		12
	Hours	**12**
Years 1-2		
GRAD 8010	Doctoral Candidacy Examination [2]	0
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

1. All course work must be approved by the advisor and the Associate Head (Graduate Studies). A student may take at most two 3 credit hour reading courses from any one instructor for credit in this degree program.
2. Students in the Ph.D. program in Mathematics are normally expected to pass their candidacy examination within 13 months after their initial registration in the program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students are required to consult with a department advisor prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Microbiology, M.Sc.

Microbiology
Head: D. Court
Campus Address/General Office: 213 Buller Building
Telephone: 204-474-9372
Email Address: Rizza.Reyes@umanitoba.ca
Website: umanitoba.ca/science/microbiology (https://umanitoba.ca/science/microbiology/)
Academic Staff: Please refer to the Microbiology website (https://umanitoba.ca/science/directory/microbiology/) for academic staff information.

Microbiology Program Information

The department offers Master of Science and Doctor of Philosophy programs of study.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Microbiology M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Microbiology M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/microbiology-msc/) page.

Degree Requirements

A minimum of 6 credit hours of course work plus a thesis are required. These are minimal requirements; students may be directed to take additional courses by their Advisor or Advisory Committee.

Expected Time to Graduate: 2 - 3 years

Progression Chart

Course	Title	Hours
Year 1		
MBIO 7010	Graduate Seminar in Microbiology 1 [1]	3
MBIO 7040	Graduate Microbiology [1]	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**6**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**6**

[1] MBIO courses can be taken in year 1 or year 2 of Master's program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the Department of Microbiology must have their programs approved by their advisor and the department head prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Microbiology, Ph.D.

Microbiology
Head: D. Court
Campus Address/General Office: 213 Buller Building
Telephone: 204-474-9372
Email Address: Rizza.Reyes@umanitoba.ca
Website: umanitoba.ca/science/microbiology (https://umanitoba.ca/science/microbiology/)
Academic Staff: Please refer to the Microbiology website (https://umanitoba.ca/science/directory/microbiology/) for academic staff information.

Microbiology Program Information

The department offers Master of Science and Doctor of Philosophy programs of study.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Microbiology Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Microbiology Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/microbiology-phd/) page.

Degree Requirements

A minimum of 6 credit hours of 7000 level course work is required beyond the M.Sc. degree, and must include one of MBIO 7010, MBIO 7020 or MBIO 7030 (Seminars in Microbiology I, II or III).

A minimum of 12 credit hours of 7000 level course work is required beyond the Honours Bachelor's degree when the M.Sc. degree is not required and 9 of these 12 credit hours should normally be from Microbiology courses (include one of MBIO 7010, MBIO 7020 or MBIO

7030). These are minimal requirements; students may be directed to take additional courses by their Advisor or Advisory Committee.

Students in the Ph.D. program are required to present one 50-minute seminar on their own research as part of the regular Department Seminar program.

Expected Time to Graduate: 4 - 6 years

Progression Chart

Course	Title	Hours
Year 1		
MBIO 7010	Graduate Seminar in Microbiology 1 [1]	3
MBIO 7040	Graduate Microbiology [1]	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**6**
Year 2		
MBIO 7020	Graduate Seminar in Microbiology 2 [1]	3
Select one of the following:		3
MBIO 7060	Microbial Interactions	
MBIO 7070	Bioprocessing	
MBIO 7100	Advanced Concepts in Molecular Biology	
MBIO 7160	Special Problems in Microbiology	
MBIO 7200	Macromolecular Structure Analysis	
Or other approved by advisory committee		
	Hours	**6**
Years 3-5		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis (register if defending that term)	0
	Hours	**0**
	Total Hours	**12**

[1] Students who have transferred from the M.Sc. program and have successfully completed MBIO 7010 and MBIO 7040 may wish to take MBIO 7020 and/or the additional graduate course in Year 1.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the Department of Microbiology must have their programs approved by their advisor and the department head prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Physics and Astronomy, M.Sc.

Physics and Astronomy
Head (Acting): Dr. Stephen Pistorius
Grad Chair: Dr. Gerald Gwinner
Campus Address/General Office: 301 Allen Building
Telephone: 204-474-9817
Fax: 204-474-7622
Email Address: info@physics.umanitoba.ca
Website: umanitoba.ca/science/physics-and-astronomy (https://umanitoba.ca/science/physics-and-astronomy/)
Academic Staff: Please refer to the Physics and Astronomy website (https://umanitoba.ca/science/directory/physics-and-astronomy/) for Faculty information.

Physics and Astronomy Program Information

The department offers opportunities for graduate study in several experimental and theoretical fields of contemporary interest, leading to the Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Physics and Astronomy M.Sc. Admission Requirements

To enter the Master's program directly, a student must have an Honours B.Sc. degree in Physics and Astronomy, Mathematics and Physics, or Engineering Physics from the University of Manitoba or the equivalent. Students without the degree entrance requirements will have their undergraduate program evaluated and may be required to complete a pre-Master's program of selected University of Manitoba undergraduate courses.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Physics and Astronomy M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/physics-msc/) page.

Degree Requirements

A Master's degree in physics normally consists of both coursework and a thesis. For students in the Comprehensive Medical Physics M.Sc. program, the course load is increased and the thesis requirement is replaced by research project.

The Master's program with thesis consists of two or three courses from the 7000 series offered by the department or from another department offering courses suitable for the candidate's program. In special cases, courses may be drawn from the 4000 series as listed. The program of study extends through a minimum period of twelve months. Frequently two summers of research work plus one winter of research and coursework are required to complete the program. In addition to coursework, these students must submit a thesis and defend it orally.

The Comprehensive M.Sc. program in medical physics is a two-year (18-month, course work, 6-month research project) program which requires 36 credits. A clinical research project in an approved laboratory and the submission of a research report is also required. On completion of the coursework and research project, the student will be required to pass a comprehensive oral examination.

Expected Time to Graduate: 2 years

Progression Charts

Thesis Program

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Courses at the 7000 level		6
Courses at the 3000 level or above [1]		6
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**12**

[1] All undergraduate courses chosen from outside the department must be relevant to the thesis work.

Comprehensive Program in Medical Physics

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
	Hours	**0**
Term 1		
PHYS 7390	Radiation Protection	3
PHYS 7360	Medical Radiation Physics	3
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**6**
Term 2		
PHYS 7370	Radiation Therapy Physics	3
PHYS 7470	Methods in Medical and Health Physics 2 - (Radiotherapy and Radiation Biology) [1]	3
BME 7012	Foundation of Physiology [2]	
ANAT 7014	Functional Human Anatomy [2]	
	Hours	**6**
Years 1-2		
Select up to 12 credit hours of additional elective courses [3]		6
	Hours	**6**
Year 2		
Term 1		
PHYS 7380	Radiation Biology	3
PHYS 7400	Linear Systems for Imaging	3
PHYS 7422	Physics of X-ray Imaging	3
	Hours	**9**
Term 2		
PHYS 7410	Diagnostic Methods	3
PHYS 7430	Physics of Nuclear Medicine	3
PHYS 7460	Methods in Medical and Health Physics 1 - (Medical Imaging and Radiation Protection) [1]	3
PHYS 7700	Research Project in Medical Health Physics	0
GRAD 7010	Comprehensive Examination	0
GRAD 7000	Master's Thesis	0
	Hours	**9**
	Total Hours	**36**

[1] Research-based M.Sc. or Ph.D. Students should NOT take PHYS 7460 and PHYS 7470.

[2] Students who have not taken Anatomy or Physiology at an undergraduate level (BIOL 1410, BIOL 1012 or BIOL 2410 or equivalent) are required to take ANAT 7014 Functional Human Anatomy (2) and/or BME 7012 Foundation of Physiology (2) in addition to the courses listed above.

[3] Up to 12 credit hours of additional electives may be taken to achieve a minimum of 36 credit hours of coursework and to meet program needs. At least 6 credit hours must be courses at the 7000 level, while 6 credit hours may be 4000 or higher level courses. Approved 4000 level courses include PHYS 4386, PHYS 4250, PHYS 4516, PHYS 4646.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have

questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Physics and Astronomy, Ph.D.

Physics and Astronomy
Head (Acting): Dr. Stephen Pistorius
Grad Chair: Dr. Gerald Gwinner
Campus Address/General Office: 301 Allen Building
Telephone: 204-474-9817
Fax: 204-474-7622
Email Address: info@physics.umanitoba.ca
Website: umanitoba.ca/science/physics-and-astronomy (https://umanitoba.ca/science/physics-and-astronomy/)
Academic Staff: Please refer to the Physics and Astronomy website (https://umanitoba.ca/science/directory/physics-and-astronomy/) for Faculty information.

Physics and Astronomy Program Information

The department offers opportunities for graduate study in several experimental and theoretical fields of contemporary interest, leading to the Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Physics and Astronomy Ph.D. Admission Requirements

The normal procedure to be a candidate for a Ph.D. degree is to complete an M.Sc. degree first. However, students with an honours degree from the University of Manitoba or equivalent may be accepted directly into the PhD program.

International students entering the Ph.D. program are strongly encouraged to write and obtain a minimum grade of 650 on the GRE physics subject examination prior to applying for the Ph.D. program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Physics and Astronomy Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/physics-phd/) page.

Degree Requirements

The main program of studies is selected from one of the major fields of research, and is supplemented by an ancillary program which takes into account the student's interests and breadth of experience. Ancillary subjects must be chosen from a field of physics distinct from the major area of study or from other departments (e.g., Mathematics) offering suitable courses.

Students must pass a candidacy exam and submit a thesis which describes their research work and which will be examined according to the general regulations.

Where admission to the Ph.D. is directly from an Honours Bachelor degree or equivalent, a minimum of 24 credit hours plus a thesis is required. The coursework must include a minimum of 18 credit hours at the 7000-level or higher with the balance of the coursework at the 3000-level or higher. A maximum of 48 credit hours of coursework is allowed toward the Ph.D. program.

The Ph.D. Program in Medical and Health Physics is designed to prepare students for a Clinical and Academic career in Medical Physics or Health Physics. The program requires a minimum of 24 credits of didactic course work beyond an Honours. B.Sc. and a minimum of 12 credits beyond a M.Sc., as well as the standard departmental Ph.D. research project in a Medical and Health Physics field.

Expected Time to Graduate: 4 years

Progression Charts

Thesis Program

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Courses at the 7000 level [1]		12
	Hours	**12**
Year 2		
GRAD 8010	Doctoral Candidacy Examination [2]	0
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

1 A maximum of 24 credit hours of coursework is allowed toward the Ph.D. program.

2 The student must successfully complete the formal candidacy examination within the first year after the completion of the Ph.D. program coursework, but in no case later than one year prior to expected graduation.

COMPREHENSIVE PROGRAM IN MEDICAL PHYSICS

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
	Hours	**0**
Term 1		
PHYS 7390	Radiation Protection	3
PHYS 7360	Medical Radiation Physics	3
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**6**
Term 2		
PHYS 7370	Radiation Therapy Physics	3
PHYS 7470	Methods in Medical and Health Physics 2 - (Radiotherapy and Radiation Biology) [1]	3
BME 7012	Foundation of Physiology [2]	
ANAT 7014	Functional Human Anatomy [2]	
	Hours	**6**
Years 1-2		
Term 2		
Select up to 12 credit hours of additional elective courses [3]		
	Hours	**0**
Year 2		
Term 1		
PHYS 7380	Radiation Biology	3
PHYS 7400	Linear Systems for Imaging	3
PHYS 7422	Physics of X-ray Imaging	3
	Hours	**9**
Term 2		
PHYS 7410	Diagnostic Methods	3
PHYS 7430	Physics of Nuclear Medicine	3
PHYS 7460	Methods in Medical and Health Physics 1 - (Medical Imaging and Radiation Protection) [1]	3
GRAD 8000	Doctoral Thesis	0
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**9**
	Total Hours	**30**

1 Research-based M.Sc. or Ph.D. Students should NOT take PHYS 7460 and PHYS 7470.

2 Students who have not taken Anatomy or Physiology at an undergraduate level (BIOL 1410, BIOL 1012 or BIOL 2410 or equivalent) are required to take ANAT 7014 Functional Human Anatomy (2) and/or BME 7012 Foundation of Physiology (2) in addition to the courses listed above.

3 Up to 12 credit hours of additional electives may be taken to achieve a minimum of 36 credit hours of coursework and to meet program needs. At least 6 credit hours must be courses at the 7000 level, while 6 credit hours may be 4000 or higher level courses. Approved 4000 level courses include PHYS 4386, PHYS 4250, PHYS 4516, PHYS 4646.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students must consult with their advisor prior to registration.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Statistics, M.Sc.

Statistics
Head: Dr. Saman Muthukumarana (Acting)
Grad Chair: Dr. Po Yang
Campus Address/General Office: 318 Machray Hall
Telephone: 204-474-9826
Fax: 204-474-7621
Email Address: grad-program@stats.umanitoba.ca
Website: umanitoba.ca/science/statistics (https://umanitoba.ca/science/statistics/)
Academic Staff: Please refer to the Statistics website (https://umanitoba.ca/science/directory/statistics/) for academic staff information.

Statistics Program Information

The University of Manitoba offers graduate programs in statistics leading to the Master of Science and Doctor of Philosophy degrees. Applications are encouraged from students with strong interest in statistics, mathematics or related fields.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Statistics M.Sc. Admission Requirements

Completion of a B.Sc. degree in Statistics is usually required for admission to the Master's program.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Statistics M.Sc. program of study (https://umanitoba.ca/faculties/graduate_studies/admissions/programs/statistics.html) page.

Degree Requirements

The Master's degree may be earned in one of three ways:

Submission of a Thesis

Course	Title	Hours
STAT 7080	Advanced Statistical Inference	3
STAT 7140	Linear Models	3
STAT 7XXX	Course at the 7000 level in statistics	3
Select 6 credit hours of approved coursework at the 4000 or 7000 level		6
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Total Hours		**15**

Submission of a Practicum

Course	Title	Hours
STAT 7080	Advanced Statistical Inference	3
STAT 7140	Linear Models	3
STAT 7290	Statistical Consulting	3
Select 6 credit hours of approved coursework at the 4000 or 7000 level		6
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Total Hours		**15**

Course Work Option

Course	Title	Hours
STAT 7080	Advanced Statistical Inference	3
STAT 7140	Linear Models	3
STAT 7320	Research Project in Statistics	3
Select 9 credit hours of approved coursework at the 7000 level in statistics		9
Select 6 credit hours of approved coursework at the 4000 or 7000 level		6
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Total Hours		**24**

Students are also expected to take part in laboratory instruction and department seminars.

Expected Time to Graduate: 1-2 years, depending on the option selected.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the Department of Statistics must consult with the grad chair and the graduate program assistant prior to attempting to register.

All students must consult with their advisor prior to registration and present a completed registration form to 318 Machray Hall. Any changes, after the initial registration, must also be approved by the advisor.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Statistics, Ph.D.

Statistics
Head: Dr. Saman Muthukumarana (Acting)
Grad Chair: Dr. Po Yang
Campus Address/General Office: 318 Machray Hall
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Email Address: grad-program@stats.umanitoba.ca
Website: umanitoba.ca/science/statistics (https://umanitoba.ca/science/statistics/)
Academic Staff: Please refer to the Statistics website (https://umanitoba.ca/science/directory/statistics/) for academic staff information.

Statistics Program Information

The University of Manitoba offers graduate programs in statistics leading to the Master of Science and Doctor of Philosophy degrees. Applications are encouraged from students with strong interest in statistics, mathematics or related fields.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Statistics Ph.D. Admission Requirements

Completion of a Master's degree in Statistics is usually required for admission to the Ph.D. program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Statistics Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/statistics-phd/) page.

Degree Requirements

Students must satisfy the following requirements:

- Within the first two years of the Ph.D. program, a minimum of 6 credit hours of courses must be taken in the areas of Advanced Theory of Probability, Advanced Theory of Inference, Advanced Applied Statistics, and Advanced Stochastic Processes.
- Candidates are required to attempt and successfully complete at least twelve credit hours at the 7000 level. These courses will normally be taken from the Department of Statistics. Courses will normally be recommended by the candidate's supervisor.
- Each Ph.D. student is required to present at least one public seminar in the area of their Ph.D. research.
- Candidates are required to pass a candidacy examination. The candidacy examination should normally be completed within one year after the formation of the student's Advisory Committee, but no later than one year prior to expected graduation. The candidacy examination will be set and administered by the candidate's Ph.D. advisory committee. The format may vary.
- A thesis is required.

Expected Time to Graduate: 5 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**0**
Years 1-2		
STAT 7XXX	Statistics courses [1]	12
	Hours	**12**
Year 2		
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**

Year 3		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
Year 4		
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
	Total Hours	**12**

[1] A minimum of 6 credit hours of courses must be taken in the areas of Advanced Theory of Probability, Advanced Theory of Inference, Advanced Applied Statistics, and Advanced Stochastic Processes.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the Department of Statistics must consult with the grad chair and the graduate program assistant prior to attempting to register.

All students must consult with their advisor prior to registration and present a completed registration form to 318 Machray Hall. Any changes, after the initial registration, must also be approved by the advisor.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Faculty of Social Work

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Social Work, M.S.W. (p. 272)	2-4	24-27	
Social Work, Ph.D. (p. 274)	5-6	24	
Social Work based in Indigenous Knowledges, M.S.W. (p. 270)	2	27-30	

Social Work based in Indigenous Knowledges, M.S.W.

Social Work
Dean: Dr. Michael Yellow Bird
Associate Dean(s): Dr. Maria Cheung (Undergraduate Programs); Dr. David Delay (Graduate Programs & Research)
Director: Dr. Mary Kate Dennis
Campus Address/General Office: 521 Tier Building
Telephone: 204-474-6663
Fax: 204-474-7594
Email Address: mswik@umanitoba.ca
Website: umanitoba.ca/social-work/ (https://umanitoba.ca/social-work/)
Academic Staff: Please refer to the Social Work website (https://umanitoba.ca/social-work/faculty-and-staff/) for Faculty information.

Master of Social Work based in Indigenous Knowledges Program Information

The Master of Social Work degree based in Indigenous Knowledges (M.S.W.- I.K.) is an advanced degree built on an Indigenous foundation, and the B.S.W. degree. While the program focuses on preparing graduates to work in Indigenous organizations and/or with Indigenous peoples, and to confront the structural barriers Indigenous peoples face, it will also prepare graduates with skills transferable to a wider range of organizations and peoples. A range of positions within the human services are open to graduates, such as family therapists, case managers, group workers, community developers, policy analysts, and administrators. In addition, graduates may be active as scholars,

politicians, senior civil servants, private consultants, and international development.

The objectives of the program are to support students to:

1. work from Indigenous perspectives;
2. understand the colonial history of events which have led to present circumstances;
3. understand social justice, anti-oppressive practices, anti-colonialism, and Indigenism;
4. explore Indigenous forms of helping and support(s) applicable to social work;
5. recover and support Indigenous values, practices, and structures;
6. empower Indigenous identities;
7. maintain a close connection with Indigenous communities and agencies, and
8. develop as advanced social work practitioners.

The foundational material of this program gives particular attention to knowledges, perspectives, values, and practices of Indigenous peoples that will support graduates to work from both Indigenous and critical social work theory perspectives. This material is relevant to Indigenous and non-Indigenous persons in their personal and professional development as social workers with advanced training. The degree is designated as Master of Social Work degree.

Considerable attention is given to issues of educational equity. Like the M.S.W. program, these matters are included within the M.S.W. based in Indigenous Knowledges program's curriculum, and every effort is made to ensure that people from marginalized groups have access to the M.S.W. based in Indigenous Knowledges program. The purpose of this initiative is to achieve equity in professional education so that no person shall be denied educational opportunities to benefits for reasons unrelated to ability. In fulfillment of this goal the aim is to correct the conditions of disadvantage in professional education experienced by First Nations, Inuit, and Metis peoples in Canada, persons with disabilities, immigrants and refugees to Canada, LGBTTQ and persons who are members of a visible minority in Canada. Educational equity does not mean treating people in the same way. It requires overt measures and the accommodation of difference while maintaining a particular focus on the experiences and perspectives of Indigenous peoples.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.S.W.-I.K. Admission Requirements

Applicants must meet the following requirements:

- Possession of a B.S.W. degree (by June 30th of the application year) from an accredited university or a four-year degree other than a B.S.W. degree from an accredited program which is recognized by the University of Manitoba.
- Participation in an admissions interview process
- Participation in a program orientation
- A well developed statement of intent
- Three letters of reference from academic, employment, and Indigenous community sources
- A minimum grade point average of 3.0 (B) is required in the last sixty credit hours of university study
- If courses have been taken subsequent to the degree as a Special Student and/or Occasional Student and/or in a subsequent degree or a Pre-Masters program, they will be calculated into the grade point average as part of the last 60 credit hours
- Applicants who self-identify as members of one or more of the Educational Equity priority groups, and who possess a grade point average between 2.5 and 2.99 will be reviewed for special consideration. Applicants with a grade point average below 2.5 will not be considered.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.S.W.-I.K. program of study (https://umanitoba.ca/explore/programs-of-study/social-work-indigenous-knowledges-msw/) page.

Degree Requirements

The total credit hours required for the program are 27 credits in the project based option plus the zero credit courses. The thesis option is 24 credit hours plus the zero credit courses. Students must successfully complete all courses in the program in order to graduate.

Students choose either the project-based option, which includes the completion of SWRK 7760 and SWRK 7790, and SWRK 7820, or the thesis option, which includes completion of SWRK 7760, and SWRK 7790. Students choosing the thesis option must register for GRAD 7000.

The program requires at least 12 months of full time study. Students who choose the thesis option are likely to require more time depending on the nature of their research. Students may take the M.S.W. based in Indigenous Knowledges program on a full time or part time basis.

Students have a limit of four years to complete the full time program and a limit of six years to complete the part time program.

Note: The M.S.W.-I.K. program is not offered through distance delivery. The MSW-IK program will incorporate Blended Learning that includes one-week intensive courses, face-to-face interactions, and the use of Educational Technology.

Expected Time to Graduate: 2 years

Course Requirements

Course	Title	Hours
SWRK 7700	Grounding Our Foundation in Indigenous Knowledges and Social Work	0
SWRK 7710	Remembering Our Histories	3
SWRK 7720	Critical Theory and Indigenous Peoples	3
SWRK 7730	Indigenous Research Methodologies and Knowledge Development	3
SWRK 7740	Indigenous Peoples, Identity, and Social Work	3
SWRK 7750	Indigeneity, Power, Privilege, and Social Work	3
SWRK 7760	Project/Thesis Seminar 1	0
SWRK 7770	Social Challenges and Indigenous Helping Practices	3

SWRK 7780	Social Work, Social Challenges, and Indigenous Peoples	3
SWRK 7790	Project/Thesis Seminar 2	0
SWRK 7800	Indigenism	3
SWRK 7810	Anti-Colonial Social Work	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select one of the following options:		0-3
Project Based Route:		
SWRK 7820	Project Seminar 3	
Thesis Based Route:		
GRAD 7000	Master's Thesis	
Total Hours		**27-30**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their faculty advisor to select and approve the courses before registering.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Social Work, M.S.W.

Social Work
Dean: Dr. Michael Yellow Bird
Associate Dean(s): Dr. Maria Cheung (Undergraduate Programs); Dr. David Delay (Graduate Programs & Research)
Campus Address/General Office: 521 Tier Building
Telephone: 204-474-7050
Fax: 204-474-7594
Email Address: social_work@umanitoba.ca
Website: umanitoba.ca/social-work/ (https://umanitoba.ca/social-work/)
Academic Staff: Please refer to the Social Work website (https://umanitoba.ca/social-work/faculty-and-staff/) for Faculty information.

Master of Social Work Program Information

The Master of Social Work program structure ensures that students have the knowledge and skills required to meet accreditation standards while continuing to allow for specialization. The program offers students flexibility in designing a program that meets their learning objectives.

The M.S.W. is an advanced specialized degree built upon the more generalist B.S.W. degree. Considerable attention is given to issues of educational equity. In addition to treating these matters as course content, every effort is made to ensure that people from marginalized groups have access to the M.S.W. program.

The purpose of this initiative is to achieve equity in professional education so that no person shall be denied educational opportunities or benefit for reasons unrelated to ability. In fulfilment of this goal, the aim is to correct the conditions of disadvantage in professional education experienced by First Nations, Inuit, and Metis peoples in Canada, persons with disabilities, immigrants and refugees to Canada, LGBTTQ and persons who are members of a visible minority in Canada. Educational equity does not mean treating people in the same way. It also requires overt measures and the accommodation of difference while maintaining a particular focus on the experiences and perspectives of Indigenous peoples.

Note: The M.S.W. program is **not** offered through Distance Delivery.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.S.W. Admission Requirements

Students must meet the following requirements:

- Possession of a B.S.W. degree (convocated) or a minimum of a four-year undergraduate degree other than a B.S.W. (convocated) by

June 30 of the application year, from an accredited program or its equivalent, which is recognized by the University of Manitoba.

- A minimum Grade Point Average of 3.0 (B) is required in the last 60 credit hours of university study.
- If courses have been taken subsequent to the degree as a Special Student and/or Occasional Student and/or in a subsequent degree or a Pre-Master program, they will be calculated into the Grade Point Average as part of the last 60 credit hours.
- Applicants who self-identify as members of one or more of the Educational Equity priority groups, and who possess a Grade Point Average between 2.5 and 2.99, will be reviewed for special consideration. Applicants with Grade Point Averages below 2.5 will not be considered.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.S.W. program of study (https://umanitoba.ca/explore/programs-of-study/social-work-msw/) page.

Degree Requirements

The credit hour requirement is 27 credit hours in the course-based option and 24 credit hours in the thesis option. Students may take the M.S.W. program on a full-time or part-time basis.

The program requires at least 12-18 months of full-time study (students who choose the thesis option may require more time depending on the nature of their research).

Expected Time to Graduate: 2-4 years

Course Requirements

All students must:

- complete four core courses (12 credit hours)
- complete additional specialized social work courses (9 credit hours)
- complete 3 credit hours of electives (which may be taken with Social Work or other departments)

Students choose either the course-based option, which includes the completion of SWRK 7180 and SWRK 7190, or the thesis option. Students completing a thesis must complete at least one course from the research cluster.

Course	Title	Hours
Select four Core Courses		12
Select three Specialized Social Work Courses		9
Select 3 credit hours of Electives (which may be taken with Social Work or other departments)		3
Select one of the following options:		0-3
Course-Based / Advanced Field Route		
SWRK 7180	Advanced Field Practice	
SWRK 7190	Integrating Theory and Research in Advanced Field Practice	
Thesis-Based Route		
GRAD 7000	Master's Thesis	
Total Hours		**24-27**

Core Courses

Course	Title	Hours
SWRK 6010	Data Analysis for Social Work Research	3
SWRK 6070	Qualitative Research in Social Work	3
SWRK 7600	Critical Perspectives and Social Work	3
SWRK 7620	Paradigms, Methodologies, and Methods for Social Work Research	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Specialized Courses		
SWRK 7630	Advanced Social Work Practice with Individuals and Families	3
SWRK 7640	Application and Critique of Theory and Research in SocialWork Practice with Individuals and Families	3
SWRK 7300	Clinical Evaluation of Social Work Interventions	3
SWRK 7650	Advanced Social Work Practice with Groups	3
SWRK 7660	Social Work Perspectives on Practice with Networks, Neighbourhoods and Communities	3
SWRK 7670	Community Mobilization: Application of Concepts in Social Work Practice with Groups, Networks and Co	3
SWRK 7430	Evaluation Research in Social Work Practice	3
SWRK 7440	Policy Analysis in Social Work Practice	3

Progression Chart

Course Requirements

All students must:

- complete four core courses (12 credit hours)
- complete additional specialized social work courses (9 credit hours)
- complete 3 credit hours of electives (which may be taken with Social Work or other departments)

Students choose either the course-based option, which includes the completion of SWRK 7180 and SWRK 7190, or the thesis option.

Course	Title	Hours
Year 1		
SWRK 6010	Data Analysis for Social Work Research	3
SWRK 6070	Qualitative Research in Social Work	3
SWRK 7600	Critical Perspectives and Social Work	3
SWRK 7620	Paradigms, Methodologies, and Methods for Social Work Research	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Select 9 credit hours of specialized courses and 3 credit hours of elective courses		12
	Hours	**24**
Year 2		
Select one of the following:		
Course-Based / Advanced Field Route:		0-3
SWRK 7180	Advanced Field Practice	
SWRK 7190	Integrating Theory and Research in Advanced Field Practice	
Thesis-Based Route:		

GRAD 7000	Master's Thesis	0
	Hours	**0-3**
	Total Hours	**24-27**

Specialized Courses

Course	Title	Hours
SWRK 7630	Advanced Social Work Practice with Individuals and Families	3
SWRK 7640	Application and Critique of Theory and Research in SocialWork Practice with Individuals and Families	3
SWRK 7300	Clinical Evaluation of Social Work Interventions	3
SWRK 7650	Advanced Social Work Practice with Groups	3
SWRK 7660	Social Work Perspectives on Practice with Networks, Neighbourhoods and Communities	3
SWRK 7670	Community Mobilization: Application of Concepts in Social Work Practice with Groups, Networks and Co	3
SWRK 7430	Evaluation Research in Social Work Practice	3
SWRK 7440	Policy Analysis in Social Work Practice	3

Note: Not all courses may be offered annually.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their faculty advisor to select and approve the courses before registering.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Social Work, Ph.D.

Social Work
Dean: Dr. Michael Yellow Bird
Associate Dean(s): Dr. Maria Cheung (Undergraduate Programs); Dr. David Delay (Graduate Programs & Research)
Campus Address/General Office: 521 Tier Building
Telephone: 204-474-7050
Fax: 204-474-7594
Email Address: social_work@umanitoba.ca
Website: umanitoba.ca/social-work/ (https://umanitoba.ca/social-work/)
Academic Staff: Please refer to the Social Work website (https://umanitoba.ca/social-work/faculty-and-staff/) for Faculty information.

Ph.D. in Social Work Program Information

The Doctor of Philosophy program is an advanced degree, focusing on developing skills for research and teaching.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Social Work Ph.D. Admission Requirements

Admission requirements to the doctoral program in Social Work include:

Master of Social Work degree, or equivalent, from an accredited degree-granting university, with a minimum grade point average of 3.0 (B) (as defined by the University of Manitoba).

Minimum research competency in both qualitative and quantitative methods equivalent to the level required for the Masters of Social Work degree from the University of Manitoba, with a minimum grade of 3.0 (B) within the last 10 years. A student not meeting this entrance requirement may be recommended for conditional admission with the stipulation that the student take the necessary course or courses. The course or courses will be an additional requirement beyond the 24 credit hours required for the program.

Evidence of educational and professional experience that will indicate a capacity to undertake research-oriented post-graduate work. Applicants will be asked to submit a curriculum vitae.

The candidate is required to submit a two-page summary of their proposal for the PhD program, which includes:

1. Rationale for the proposed research
2. Research questions
3. A concise literature review of the topic
4. Proposed methodology for the research
5. Outline a plan to complete the research

The proposal should be clear enough that a potential faculty advisor can be identified and, in addition, the applicant must present a letter (email confirmation is acceptable) of an agreement with a proposed advisor who agrees to serve as the advisor.

Selection of students for admission is based on the recommendations of a Selection Committee of a minimum of three persons appointed by the Ph.D. Program Committee (for composition of this committee, please refer to the Faculty of Social Work) to evaluate each applicant's qualifications and report on his/her suitability for Ph.D. studies. Acceptance is subject to approval by the Ph.D. Program Committee and the Graduate Programs Committee; however, the Graduate Programs Committee may delegate this responsibility to the Ph.D. Program Committee. Selection decisions made by the Faculty of Social Work are presented as recommendations that must be approved by the Faculty of Graduate Studies.

Advising

Each student must contract with an advisor upon admission. An advisory committee that includes the advisor and two additional members will be appointed to assist the student in developing a study plan and to supervise the student's research. All members of the advisory committee must be members of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Social Work Ph.D program of study (https://umanitoba.ca/explore/programs-of-study/social-work-phd/) page.

Degree Requirements

The program consists of:

- 24 credit hours of approved 7000-level course work beyond the M.S.W. degree,
- a candidacy examination,
- a thesis proposal, and
- a Ph.D. thesis.

A minimum of two years of study (the Fall and Winter terms of the first and second year following admission) is required.

Candidacy

A candidacy examination committee will also be appointed when the student begins to prepare for the candidacy examination. This three-person committee, which includes the advisor, is responsible for administering the candidacy examination. The candidacy examination should be taken within a year of completion of coursework. The candidacy examination consists of a major paper on a topic within the student's general area of study and an oral examination of the topic covered in the paper.

Dissertation Research

The student's Ph.D. advisory committee, chaired by a thesis advisor, provides advice and guidance in the development of the proposal for the dissertation, and during the ongoing research phase. Normally, advisory committee members become members of the examining committee for the dissertation during the final examination for the Ph.D. degree.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SWRK 8010	Perspectives on Knowledge for Social Work	3
SWRK 8100	Social Work Past and Present: Trends, Institutions and Practices	3
	Hours	**6**
Year 2		
Select 9 credit hours in Research Courses [1]		9
Select 6 credit hours in Specialization-Focused Courses [2]		6
SWRK 8200	Indigenizing and Decolonizing the Global Academy: The Role of Social Work Education and Practice	3
Candidacy [3]		
	Hours	**18**
Year 3		
GRAD 8010	Doctoral Candidacy Examination (Successful completion of Candidacy Paper)	0
GRAD 8000	Doctoral Thesis (Thesis Proposal Approved by Committee)	0
Finalize Ethics Approval Application		
Ethics Approval Obtained		
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis (Start Data Collection)	0
	Hours	**0**
Years 5-6		
GRAD 8000	Doctoral Thesis	0
Successfully Defend the Doctoral Dissertation		
	Hours	**0**
	Total Hours	**24**

[1] Courses selected by the student in consultation with her or his advisory committee to further her or his specialized program of study. The main criterion for selection is the appropriateness of the methodologies covered in selected courses for the area of specialization being pursued. It is strongly recommended that courses focusing on both quantitative and qualitative methodologies be included. Course selection must be approved by the Ph.D. Program Committee.

2 Courses selected by the student in consultation with her or his advisory committee to establish expertise in a particular area of specialization defined as a field of policy, theory, practice or practice method. The course selection must be approved by the Ph.D. Program Committee.

3 Selection of Candidacy Committee. Proposal for Candidacy paper approved.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Students must meet with their faculty advisor to select and approve the courses before registering.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Marcel A. Desautels Faculty of Music Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Music, M.Mus. (p. 278)	2	24	
Music Research, M.A. (p. 276)	2	21	

Music Research, M.A.

Music
Dean: Dr. Edward Jurkowski
Associate Dean(s): Dr. Edward Jurkowski (Acting), Graduate Programs and Research; Dr. Laura Loewen, Undergraduate Programs
Campus Address/General Office: T319 Taché Hall, 150 Dafoe Road
Telephone: 204-474-9310
Fax: 204-474-7546
Email Address: music@umanitoba.ca
Website: umanitoba.ca/music/ (https://umanitoba.ca/music/)
Academic Staff: Please refer to the Music website (https://umanitoba.ca/music/faculty-instructors-staff/) for academic staff information.

Music Research Program Information

The Marcel A. Desautels Faculty of Music offers a Master of Arts in Music Research that focuses on graduate-level research in music, broadly in the areas of Musicology and Music Theory.

M.A. Admission Requirements

Persons who have completed a Bachelor of Music, a Bachelor of Arts with a major in Music, or a related degree may apply for admission to the M.A. program.

Diagnostic Examination

Students admitted to the M.A. in Music Research program must demonstrate knowledge of music theory and music history comparable to that of B.Mus. graduates of the Desautels Faculty of Music. This will normally be assessed by diagnostic examinations administered in the week preceding the first week of classes in the Fall semester. Appropriate review materials will be made available to students in advance of the diagnostic examinations. Examinations will be evaluated by members of the music theory and musicology faculty, respectively.

Incoming graduate students who do not achieve satisfactory results on any portion of these diagnostic examinations may be required to undertake remediation. Such remediation will normally take the form of successful completion of undergraduate coursework, normally not to exceed 9 CRH, in the Desautels Faculty of Music, which will not count for credit toward the M.A. in Music Research. The associate dean

responsible for graduate programs will assign remedial coursework on the advice of the musicology and music theory faculty.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Music Research M.A. program of study (https://umanitoba.ca/explore/music-research-ma/) page.

Degree Requirements

The M.A. in Music Research requires 21 credit hours plus a Thesis or Practicum.

All students must take the following core courses:

Course	Title	Hours
GRAD 7000	Master's Thesis	0
or GRAD 7030	Master's Practicum	
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MUSC 7050	Bibliography and Research Methods	3

- Students will also complete one 7000-level Musicology course (3 CH), and one 7000-level Music Theory course (3 CH). The remaining program requirements include four courses (12 CH) from a list of offerings that include:
  - MUSC 7100 Proseminar in Musicology (3 CH)
  - MUSC 7120 Seminar in Musicology (3 CH)
  - MUSC 7130 Seminar in Ethnomusicology (3 CH)
  - MUSC 7200 Proseminar in Music Theory (3 CH)
  - MUSC 7210 Seminar in Music Theory/Analysis ((3 CH)
  - MUSC 7240 Music Theory Pedagogy (3 CH)
- At least 9 credit hours must consist of 7000-level Musicology and/or Music Theory courses. Additional elective(s) would be assigned by advisement.
- Students must maintain a minimum degree grade point average of 3.0 with no grade below C+.

Second Language Reading Requirement

Students must demonstrate a reading proficiency in one language other than English. The language required will normally be French, German or Italian. Other languages will be accepted if more appropriate to the student's program. The specific requirement will be determined in consultation with the student's committee. This requirement may be met through one of the following:

- Evidence of the completion of an undergraduate language course at the 1000 level or above in the five years preceding acceptance into the program.
- The translation, using a dictionary, of a passage in the major area of study.
- Completion of a course at the 1000 or higher level after registration in the Master's degree program.
- Determination by the student's committee that the requirement has been met through previous education and/or experience.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MUSC 7050	Bibliography and Research Methods	3
7000-level Musicology course		3
MUSC 7100	Proseminar in Musicology	
MUSC 7120	Seminar in Musicology [1]	
MUSC 7130	Seminar in Ethnomusicology	
7000-level Music Theory course		3
MUSC 7200	Proseminar in Music Theory	
MUSC 7210	Seminar in Music Theory/Analysis [1]	
MUSC 7240	Music Theory Pedagogy	
7000-level Musicology or Music Theory courses		6
	Hours	**15**
Year 2		
GRAD 7000 or GRAD 7030	Master's Thesis or Master's Practicum	0
7000-level Musicology or Music Theory courses		6
	Hours	**6**
	Total Hours	**21**

[1] The content for MUSC 7120, 7130 and MUSC 7210 will change each time these courses are offered, allowing students to repeat these courses for credit when the subtitle differs.

Notes:

- A formal written proposal for the thesis topic must be submitted to and approved by the Advisory Committee by the end of the first year in the program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Not all courses are offered each year: please check with the Faculty's Registrar for current and upcoming offerings.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Music, M.Mus.

Music
Dean: Dr. Edward Jurkowski
Associate Dean(s): Dr. Edward Jurkowski (Acting), Graduate Programs and Research; Dr. Laura Loewen, Undergraduate Programs
Campus Address/General Office: T319 Tache Hall, 150 Dafoe Road
Telephone: 204-474-9310
Fax: 204-474-7546
Email Address: music@umanitoba.ca
Website: umanitoba.ca/music/ (https://umanitoba.ca/music/)
Academic Staff: Please refer to the Music website (https://umanitoba.ca/music/faculty-instructors-staff/) for academic staff information.

Music Program Information

The Marcel A. Desautels Faculty of Music offers a Master of Music (M.Mus.) in three major areas: performance, composition and conducting. Students in the string component of the program are eligible for adjunct training by a special agreement with the Winnipeg Symphony Orchestra. Students in the voice component are eligible to be considered for training and solo professional activities with Winnipeg operatic companies, choral organizations and chamber groups. Students in the collaborative piano component are eligible to be considered for training with Winnipeg operatic companies and choral organizations or with professional chamber ensembles.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.Mus. Admission Requirements

Applicants must normally hold an undergraduate degree with a major in music from an institution recognized by the Faculty of Graduate Studies (e.g. Bachelor of Music, Bachelor of Arts with a major in Music, etc.). The Faculty may recommend for admission applicants holding other qualifications (e.g. conservatory diplomas) on the basis of exceptional professional experience and accomplishment. Applicants admitted on the basis of a video audition will be granted provisional status in the M.Mus. program pending a successful live audition after the student's arrival on campus.

Diagnostic Examinations

Students admitted to the M.Mus. program must demonstrate knowledge of music theory and music history comparable to that of B.Mus. graduates of the Faculty. This will normally be assessed by diagnostic examinations administered by the Faculty prior to the first day of fall-semester classes. Appropriate review materials will be made available to students in advance of the diagnostic examinations.

Incoming graduate students who do not achieve satisfactory results on any component of these diagnostic examinations may be required to undertake remediation. Such remediation will normally take the form of successful completion of undergraduate coursework in the Faculty, which will not count for credit toward the M.Mus.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.Mus. program of study (https://umanitoba.ca/explore/programs-of-study/music-mmus/) page.

Degree Requirements

The Faculty offers three program areas leading to the M.Mus.: **Performance, Conducting,** and **Composition**.

All Master of Music students take the following core courses:

Course	Title	Hours
MUSC 7100	Proseminar in Musicology	3
or similar 7000-level Musicology course		
MUSC 7050	Bibliography and Research Methods	3
MUSC 7200	Proseminar in Music Theory [1]	3
MUSC 7400	Major Practical Study 1	3
MUSC 7410	Major Practical Study 2	3
GRAD 7030	Master's Practicum (P/F)	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

[1] MUSC 7200: Students who achieve satisfactory evaluations on all components of the music theory diagnostic exam may substitute another 7000-level music theory/analysis course with the permission of the instructor.

- Master of Music students will also take discipline-specific electives for a degree total of 24 credit hours.
- Students must maintain a minimum degree grade point average of 3.0 with no grade below C+, and
- Maintain a minimum grade of B+ in MUSC 7400 and MUSC 7410

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MUSC 7100	Proseminar in Musicology	3
or similar 7000-level Musicology course		
MUSC 7050	Bibliography and Research Methods	3
MUSC 7400	Major Practical Study 1	3
MUSC XXXX	Stream Specific Requirements [1]	9
Performance: MUSC 7180 (3); Two MUSC electives (6) [2]		
Composition: MUSC 7600 (3); MUSC 7810 (3); One MUSC elective (3)		
Conducting: MUSC 7180 (3); Two MUSC electives (6) [2]		
	Hours	**18**
Year 2		
GRAD 7030	Master's Practicum	0
MUSC 7410	Major Practical Study 2	3
MUSC 7200	Proseminar in Music Theory [3]	3
	Hours	**6**
	Total Hours	**24**

1. Different performance disciplines have specific requirements. Please consult the supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for full course listings.
2. MUSC 7180 is CO for Year 1 with continued enrolment in Year 2.
3. MUSC 7200: Students who achieve satisfactory evaluations on all components of the music theory diagnostic exam may substitute another 7000-level music theory/analysis course with the permission of the instructor.

Additional Specifications by Concentration

- **Performance:** A formal, written proposal for the research paper must be submitted to and approved by the Advisory Committee by the end of the first year in the program for students electing to complete one recital and a research paper. A formal, written proposal for the recital program must be submitted to and approved by the Advisory Committee at least 60 calendar days prior to the proposed recital date.
- **Composition**: A formal, written proposal for the thesis/practicum must be submitted to and approved by the Advisory Committee by the end of the first year in the program. The repertoire for the recital will be developed in consultation with the Advisory Committee. A formal, written proposal for the recital program must be submitted to and approved by the Advisory Committee 60 calendar days prior to the proposed recital date. The Advisory Committee will consider the extent of the required performing forces, the proposed duration, and the technical requirements of the body of work in adjudicating appropriateness.
- **Conducting**: A formal, written proposal for the recital program must be submitted to and approved by the Advisory Committee at least 30 calendar days prior to the proposed recital date. The Pre-Recital Hearing for conducting students will normally consist of an evaluation by the Advisory Committee of a rehearsal prior to the scheduled recital.

The thesis/practicum for M.Mus. students will consist of the following components:

- **Performance:** Two recitals *OR* One recital and a research paper
- **Composition:** An original musical composition or collection of compositions accompanied by a significant analytical study of the piece(s) *AND* a series of recitals/performances.
- **Conducting**: A curated video portfolio of the student's work will be submitted to the Advisory Committee at the end of their first year of Major Practical Study *AND* students will conduct repertoire totalling 45-60 minutes in DFOM large ensemble performances and/or a final graduate recital.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Not all courses are offered each year: please check with the Faculty's Registrar for current and upcoming offerings.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Price Faculty of Engineering

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biomedical Engineering, M.Sc. (p. 280)	2	12	
Biomedical Engineering, Ph.D. (p. 282)	4	12, 18, or 24	
Civil Engineering, M.Eng. (p. 284)	2	30	
Civil Engineering, M.Sc. (p. 286)	2	12	
Civil Engineering, Ph.D. (p. 287)	4	12	
Electrical and Computer Engineering, M.Eng. (p. 288)	2	24	
Electrical and Computer Engineering, M.Sc. (p. 290)	2	12	
Electrical and Computer Engineering, Ph.D. (p. 291)	4	12-30	
Mechanical Engineering, M.Eng. (p. 293)	2	24	
Mechanical Engineering, M.Sc. (p. 294)	2	12	
Mechanical Engineering, Ph.D. (p. 295)	4	12	

Biomedical Engineering, M.Sc.

Biomedical Engineering
Head: Dr. Sherif Sherif
Campus Address/General Office: SP-422 EITC
Telephone: Please use email
Email Address: info_biomedical@umanitoba.ca
Website: umanitoba.ca/engineering/biomedical (https://umanitoba.ca/engineering/biomedical/)
Academic Staff: Please refer to the Biomedical Engineering website (https://umanitoba.ca/engineering/faculty-staff/biomedical-engineering/) for Faculty information.

Biomedical Engineering Program Information

Biomedical Engineering (BME) at the University of Manitoba is a graduate program toward Master of Science, Doctor of Philosophy, and/or MD-PhD degrees. It is an interdisciplinary program between the three faculties of Engineering, Medicine and Science, and the associated hospitals and medical industries.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Biomedical Engineering M.Sc. Admission Requirements

A student must hold a four year B.Sc. degree in any of the following faculties from a recognized University: Engineering, Natural Sciences, or Medicine/Health Sciences.

In addition, the following **pre-requisite** courses are required prior to an offer of admissions:

Course	Title	Hours
MATH 1210	Techniques of Classical and Linear Algebra	3
MATH 1510	Applied Calculus 1	3
PHYS 1050	Physics 1: Mechanics	3

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biomedical Engineering M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/biomedical-engineering-msc/) page.

Degree Requirements

A minimum of 12 credit hours plus a thesis are required in the BME program. The minimum must include 6 credit hours from the following 6 core courses:

Course	Title	Hours
BME 7012	Foundation of Physiology	2
ANAT 7014	Functional Human Anatomy	2
BME 7022	Biomedical Instrumentation	2
BME 7024	Basics of Electromagnetic	2

BME 7026	Basics of Biological Signal Analysis	2
BME 7028	Basics of Biomechanics	2

plus the 0 credit hour Ethics course (BME 7040) and the 0 credit hour BME Seminar course (BME 7000). Students from Engineering backgrounds normally have to take anatomy and physiology. Students from Science backgrounds should not enroll in anatomy and physiology.

In addition, 6 credit hours of the minimum requirement must be taken at the 7000 level relevant to the student's thesis from any departments of the faculties of Engineering, Science and Health Sciences or Department of Physiology and Pathophysiology based on the suggestions of the student's Advisory Committee.

The student's program of study must be recommended by the student's advisory committee and approved by the Chair of the Curriculum Committee or delegate. Students who lack the necessary background knowledge may be required, by their Advisory Committee, to take additional courses up to the maximum allowed by FGS regulations.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BME 7000	Biomedical Engineering Seminar [1,2]	0
BME M.Sc. Thesis Proposal		0
XXX 7000	Research courses at the 7000-level or 8000-level [3]	6
	Hours	**6**
Years 1-2		
BME 7040	Biomedical Ethics	0
Select 2 BME Core Courses [4,5,6]		6
	Hours	**6**
Year 2		
Complete BME Core Course Requirements [5]		
Complete Research Course Requirements		
GRAD 7000	Master's Thesis	0
Final Thesis Presentation [7]		
	Hours	**0**
	Total Hours	**12**

1. BME Graduate Students are required to enroll and attend the Biomedical Engineering Seminar each term until graduation.
2. BME M.Sc. student must present at least once at the BME Seminar before graduation.
3. **Research Courses** as determined by the Academic Advisor. Courses at the 7000-level or 8000-level relevant to the student's research from any departments in the Faculties of Engineering, Science and Health Sciences or from the Physiology and Pathophysiology Program based on the recommendations of the student's Advisor and/or Advisory Committee.
4. Any combination of courses from BME 7012, ANAT 7014, BME 7022, BME 7024, BME 7026, BME 7028
5. Where a student has already completed similar courses to the BME core courses, the student may, with the recommendation of their Advisory Committee and with the approval of the Chair of the Curriculum Committee or delegate, be exempted from taking the equivalent core courses and allowed to fulfill the six (6) ch of core courses with six (6) ch of other courses taken at the 7000-8000 level from any department in the Faculties of Engineering, Science and Health Sciences or from the Physiology and Pathophysiology Program.
6. BME M.Sc. Program Requirements: http://umanitoba.ca/biomedical_engineering/current_students/msc.html#CourseReq (Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)
7. http://umanitoba.ca/biomedical_engineering/current_students/msc.html#FinalThesisPresentation

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Biomedical Engineering, Ph.D.

Biomedical Engineering
Head: Dr. Sherif Sherif
Campus Address/General Office: SP-422 EITC
Telephone: Please use email
Email Address: info_biomedical@umanitoba.ca
Website: umanitoba.ca/engineering/biomedical (https://umanitoba.ca/engineering/biomedical/)
Academic Staff: Please refer to the Biomedical Engineering website (https://umanitoba.ca/engineering/faculty-staff/biomedical-engineering/) for Faculty information.

Biomedical Engineering Program Information

Biomedical Engineering (BME) at the University of Manitoba is a graduate program toward Master of Science, Doctor of Philosophy, and/or MD-PhD degrees. It is an interdisciplinary program between the three faculties of Engineering, Medicine and Science, and the associated hospitals and medical industries.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Biomedical Engineering Ph.D. Admission Requirements

Students admitted to this program will normally have a M.Sc. degree from a Faculty of Engineering, Health Sciences, or Science or with a Doctor of Medicine (MD) Degree from a recognized university.

In addition, the following **pre-requisite** courses are required prior to an offer of admissions:

Course	Title	Hours
MATH 1210	Techniques of Classical and Linear Algebra	3
MATH 1510	Applied Calculus 1	3
PHYS 1050	Physics 1: Mechanics	3

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biomedical Engineering Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/biomedical-engineering-phd/) page.

Degree Requirements

A minimum of 12 credit hours plus a thesis are required in the BME program. The minimum must include 6 credit hours from the following core courses:

Course	Title	Hours
BME 7012	Foundation of Physiology	2
ANAT 7014	Functional Human Anatomy	2
BME 7022	Biomedical Instrumentation	2
BME 7024	Basics of Electromagnetic	2
BME 7026	Basics of Biological Signal Analysis	2
BME 7028	Basics of Biomechanics	2

plus the 0 credit hour Ethics course (BME 7040) and the 0 credit hour BME Seminar course (BME 7000).

Students from Engineering backgrounds normally have to take anatomy and physiology. Students from Science backgrounds should not enroll in anatomy and physiology.

The remaining 6 credit hours of the minimum course requirement must be taken at the 7000-level relevant to the student's thesis from any departments of the faculties of Engineering, Science and Health Sciences or Department of Physiology and Pathophysiology based on the suggestions of the student's Advisory Committee. The student's program of study must be recommended by the student's advisory committee and approved by the Chair of the Curriculum Committee or delegate. Students who lack the necessary background knowledge may be required, by their Advisory Committee, to take additional courses up to the maximum allowed by FGS regulations.

Expected Time to Graduate: 4 years

Progression Chart

12-Credit Hour Program

- Students with a Master of Science program in Engineering, Science, and/or Medical
- 6 credit hours of Core courses
- At least 6 credit hours at the 7000 level or higher

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BME 7000	Biomedical Engineering Seminar [1,2]	0
BME 7040	Biomedical Ethics	0
BME Thesis Proposal Presentation		0
	Hours	**0**
Years 1-2		
Select 6 credit hours in BME Core Courses of the following: [3]		6
BME 7012	Foundation of Physiology	
ANAT 7014	Functional Human Anatomy	
BME 7022	Biomedical Instrumentation	
BME 7024	Basics of Electromagnetic	
BME 7026	Basics of Biological Signal Analysis	
BME 7028	Basics of Biomechanics	

Select at least 6 credit hours in Research courses at the 7000 level or higher [4]		6
	Hours	**12**
Year 2		
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Years 2-4		
GRAD 8000	Doctoral Thesis [5]	0
	Hours	**0**
	Total Hours	**12**

1. BME Graduate Students are required to enroll and attend the Biomedical Engineering Seminar each term until graduation.
2. BME M.Sc. student must present at least once at the BME Seminar before graduation.
3. Where a student has already completed similar courses to the BME core courses, the student may, with the recommendation of their Academic Advisor and with the approval of the Chair of the Curriculum Committee or delegate, be exempted from taking the equivalent core courses and allowed to fulfill the six (6) ch of core courses with six (6) ch of other courses taken at the 7000-8000 level from any department in the Faculties of Engineering, Science, and Health Sciences or from the Physiology and Pathophysiology Program.
4. As determined by the Academic Advisor http://umanitoba.ca/biomedical_engineering/current_student/phd.html#PhD_ProgramType
5. Notes regarding thesis completion: http://umanitoba.ca/biomedical_engineering/current_students/phd.html

Notes:

BME M.Sc. Program Requirements: https://umanitoba.ca/biomedical_engineering/current_students/phd.html#CourseReq (Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

(Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

18-Credit Hour Program (Minimum)

- Admitted directly from a Doctor of Medicine Degree (MD)
- 6 credit hours of Core courses
- At least 12 credit hours at the 7000 or higher
- Additional undergraduate courses might be required pending review by the Advisory Committee

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BME 7000	Biomedical Engineering Seminar [1,2]	0
BME 7040	Biomedical Ethics	0
BME Thesis Proposal Presentation		0
	Hours	**0**
Years 1-2		
Select 6 credit hours in BME Core Courses of the following: [3]		6
BME 7012	Foundation of Physiology	
ANAT 7014	Functional Human Anatomy	
BME 7022	Biomedical Instrumentation	
BME 7024	Basics of Electromagnetic	
BME 7026	Basics of Biological Signal Analysis	
BME 7028	Basics of Biomechanics	
Select at least 12 credit hours in Research courses at the 7000 level or higher [4]		12
	Hours	**18**
Year 2		
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Years 2-4		
GRAD 8000	Doctoral Thesis [5]	0
	Hours	**0**
	Total Hours	**18**

1. BME Graduate Students are required to enroll and attend the Biomedical Engineering Seminar each term until graduation.
2. BME M.Sc. student must present at least once at the BME Seminar before graduation.
3. Where a student has already completed similar courses to the BME core courses, the student may, with the recommendation of their Academic Advisor and with the approval of the Chair of the Curriculum Committee or delegate, be exempted from taking the equivalent core courses and allowed to fulfill the six (6) ch of core courses with six (6) ch of other courses taken at the 7000-8000 level from any department in the Faculties of Engineering, Science, and Health Sciences or from the Physiology and Pathophysiology Program.
4. As determined by the Academic Advisor http://umanitoba.ca/biomedical_engineering/current_student/phd.html#PhD_ProgramType
5. Notes regarding thesis completion: http://umanitoba.ca/biomedical_engineering/current_students/phd.html

Notes:

BME M.Sc. Program Requirements: https://umanitoba.ca/biomedical_engineering/current_students/phd.html#CourseReq (Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

(Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

24-Credit Hour Program

- BME MSc Students who do not hold an MSc **and** who have been recommended for transfer to the BME Ph.D. program
- 6 credit hours of Core courses
- 12 credit hours of Research courses, recommended and approved by the Academic Advisor (6 credit hours may be at the 4000 level or higher)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BME 7000	Biomedical Engineering Seminar [1,2]	0

BME 7040	Biomedical Ethics	0
BME Thesis Proposal Presentation		
	Hours	**0**
Years 1-2		
Select 6 credit hours of BME Core Courses from the following: [3]		6
BME 7012	Foundation of Physiology	
ANAT 7014	Functional Human Anatomy	
BME 7022	Biomedical Instrumentation	
BME 7024	Basics of Electromagnetic	
BME 7026	Basics of Biological Signal Analysis	
BME 7028	Basics of Biomechanics	
Select 12 credit hours of Research Courses [4,5]		12
	Hours	**18**
Year 2		
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Years 2-4		
GRAD 8000	Doctoral Thesis [6]	0
	Hours	**0**
	Total Hours	**18**

1 BME Graduate Students are required to enroll and attend the Biomedical Engineering Seminar each term until graduation.

2 BME M.Sc. student must present at least once at the BME Seminar before graduation.

3 Where a student has already completed similar courses to the BME core courses, the student may, with the recommendation of their Academic Advisor and with the approval of the Chair of the Curriculum Committee or delegate, be exempted from taking the equivalent core courses and allowed to fulfill the six (6) ch of core courses with six (6) ch of other courses taken at the 7000-8000 level from any department in the Faculties of Engineering, Science, and Health Sciences or from the Physiology and Pathophysiology Program.

4 As determined by the Academic Advisor http://umanitoba.ca/biomedical_engineering/current_student/phd.html#PhD_ProgramType

5 Recommended and approved by the Academic Advisor (6 credit hours may be at the 4000 level or higher).

6 Notes regarding thesis completion: http://umanitoba.ca/biomedical_engineering/current_students/phd.html

Notes:

BME M.Sc. Program Requirements: https://umanitoba.ca/biomedical_engineering/current_students/phd.html#CourseReq (Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

(Engineering Student must take Life Science Core Courses and Life Science Students must take Engineering Core Courses)

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Civil Engineering, M.Eng.

Civil Engineering
Head: Dr. Shawn Clark, P.Eng.
Associate Head: Dr. Mohamed Bassuoni, P.Eng. (Graduate Programs); Dr. Jonathan Regehr, P.Eng. (Undergraduate Programs)
Campus Address/General Office: E1 - 368 Engineering
Telephone: 204-474-8596
Fax: 204-474-7513
Email Address: ce_graduate@umanitoba.ca
Website: umanitoba.ca/engineering/civil (https://umanitoba.ca/engineering/civil/)

Academic Staff: Please refer to the Civil Engineering (https://umanitoba.ca/engineering/faculty-staff/civil-engineering/) website for Faculty information.

Civil Engineering Program Information

The Department of Civil Engineering offers programs of coursework and research leading to the Master of Science, Master of Engineering and Doctor of Philosophy in: environmental engineering; geotechnical engineering; structural engineering; transportation engineering and water resources engineering.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Civil Engineering M.Eng. Admission Requirements

Applicants must have a minimum of a B.Sc. degree in Engineering from a recognized university. In exceptional cases, based on the candidate's professional experience, this requirement may be waived upon the recommendation from the department. For full-time study, it is desirable that the applicant has one or more years of engineering experience.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Civil Engineering M.Eng. program of study (https://umanitoba.ca/explore/programs-of-study/civil-engineering-msc-meng/) page.

Degree Requirements

The minimum requirement for the M.Eng. degree is 30 credit hours, consisting of 24 credit hours of coursework (at least 18 of which should be a the 7000 level); plus an additional 6 credit hours for the course GRAD 7050, M.Eng. Project and Report. All of the coursework and the research project proposal must be approved by the student's advisor.

It is the department's policy that graduate students shall take at least 6 credit hours in their core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

Expected Time to Graduate: 2 years

Progression Chart

All students must register in GRAD 7020 each term (Fall, Winter & Summer) as long as they are in the program.

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be completed in first term)	0
COURSE 7XXX	Various Coursework [1]	24
	Hours	**24**
Year 2		
GRAD 7050	M.Eng. Project and Report [2]	6
	Hours	**6**
	Total Hours	**30**

1. The minimum requirement for the M.Eng. degree is 24 credit hours of coursework including at least 18 credit hours at the 7000 level. All of the coursework and the research project proposal must be approved by the student's advisor. It is the Department's policy that graduate students shall take at least 6 credit hours in his/her core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.
2. A 15-20 minute presentation, to the examining committee, must be made by the student on the practicum work to complete his/her M.Eng. program. The oral presentation will be followed by questions from the examining committee. The Chair may exercise discretion in inviting questions from guests. The duration of the oral examination shall not exceed one hour.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-

requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Civil Engineering, M.Sc.

Civil Engineering
Head: Dr. Shawn Clark, P.Eng.
Associate Head: Dr. Mohamed Bassuoni, P.Eng. (Graduate Programs); Dr. Jonathan Regehr, P.Eng. (Undergraduate Programs)
Campus Address/General Office: E1 - 368 Engineering
Telephone: 204-474-8596
Fax: 204-474-7513
Email Address: ce_graduate@umanitoba.ca
Website: umanitoba.ca/engineering/civil (https://umanitoba.ca/engineering/civil/)
Academic Staff: Please refer to the Civil Engineering (https://umanitoba.ca/engineering/faculty-staff/civil-engineering/) website for Faculty information.

Civil Engineering Program Information

The Department of Civil Engineering offers programs of coursework and research leading to the Master of Science, Master of Engineering and Doctor of Philosophy in: environmental engineering; geotechnical engineering; structural engineering; transportation engineering and water resources engineering.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Civil Engineering M.Sc. Admission Requirements

Applicants are required to hold a Bachelor's degree in Civil Engineering from a recognized university. Applicants with other engineering degrees or with Honours degrees in related areas may also be accepted and recommended at the discretion of the Department.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Civil Engineering M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/civil-engineering-msc-meng/) page.

Degree Requirements

The M.Sc. is a research degree consisting of coursework and thesis. A minimum of 12 credit hours of coursework shall be required with at least 9 credit hours at the 7000 level as approved by the student's advisory committee.

It is the Department's policy that graduate students shall take at least 6 credit hours in their core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor. The candidate is required to make an oral presentation on the completed M.Sc. thesis to the Examining Committee, and to pass an oral examination.

Expected Time to Graduate: 2 years

Progression Chart

All students must register in GRAD 7020 each term (Fall, Winter & Summer) as long as they are in the program.

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be completed in first term)	0
COURSE 7XXX	Various Coursework [1]	12
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**12**

1. The M.Sc. is a research degree consisting of coursework and thesis. A minimum of 12 credit hours of coursework shall be required with at least 9 credit hours at the 7000 level as approved by the student's advisory committee. It is the Department's policy that graduate students shall take at least 6 credit hours in his/her core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.
2. The oral examination will consist of an oral presentation by the student (20 minutes maximum) on the thesis research, followed by a questions period, by the examining committee. The duration of the question period shall not exceed 90 minutes. The Chair may exercise discretion in inviting questions from guests.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Civil Engineering, Ph.D.

Civil Engineering
Head: Dr. Shawn Clark, P.Eng.
Associate Head: Dr. Mohamed Bassuoni, P.Eng. (Graduate Programs); Dr. Jonathan Regehr, P.Eng. (Undergraduate Programs)
Campus Address/General Office: E1 - 368 Engineering
Telephone: 204-474-8596
Fax: 204-474-7513
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Website: umanitoba.ca/engineering/civil (https://umanitoba.ca/engineering/civil/)
Academic Staff: Please refer to the Civil Engineering (https://umanitoba.ca/engineering/faculty-staff/civil-engineering/) website for Faculty information.

Civil Engineering Program Information

The Department of Civil Engineering offers programs of coursework and research leading to the Master of Science, Master of Engineering and Doctor of Philosophy in: environmental engineering; geotechnical engineering; structural engineering; transportation engineering and water resources engineering.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Civil Engineering Ph.D. Admission Requirements

Admission to the Ph.D. program is normally from the Master's degree level, i.e., M.Eng. or M.Sc. Students in a Master's program who have achieved an average GPA of 4.0 in their last 60 credit hours of undergraduate studies may be allowed to transfer to the PhD program without being required to write a Master's thesis provided they meet the following conditions:

1. Completion of 6 graduate courses (18 credits) with a grade of A or better in each;
2. Satisfactory progress in the research program;
3. Written recommendation from the supervisor, the thesis advisory committee and a selection committee (appointed by the head);
4. Approval by the department and Faculty of Graduate Studies.

The transfer must take place within 20 months of initial registration in the Master's program. Following transfer, all the requirements of the doctoral program apply, including the completion of an additional 12 credit hours at the 7000 level.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Civil Engineering Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/civil-engineering-phd/) page.

Degree Requirements

The Ph.D. program consists of coursework, original research and thesis. A minimum of 12 credit hours of coursework (all at the 7000 level) is required beyond the Master's degree or its equivalent. The program of study must be approved by the student's advisor, the advisory committee and the Department Head.

It is the department's policy that graduate students shall take at least 6 credit hours in their core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

Expected Time to Graduate: 4 years

Progression Chart

All students must register in GRAD 8020 each term (Fall, Winter & Summer) as long as they are in the program.

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be completed first term)	0
COURSE 7XXX	Courses designated 7000 level or above [1]	12
GRAD 8010	Doctoral Candidacy Examination [2]	0
	Hours	**12**

Year 2		
GRAD 8000	Doctoral Thesis [3]	0
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis [4]	0
	Hours	**0**
	Total Hours	**12**

1 The Ph.D. program consists of coursework, original research and a thesis. A minimum of 12 credit hours of coursework (all at the 7000 level) is required beyond the Master's degree. The program of study must be approved by the student's advisor, the advisory committee and the Department Head. For students who have transferred directly from the Master's program, all the requirements of the doctoral program apply, including the completion of an additional 12 credit hours at the 7000 level. It is the Department's policy that graduate students shall take at least 6 credit hours in his/her core area of research within Civil Engineering with no more than 6 credit hours of graduate level courses from one professor.

2 The examination process starts upon completion of most of the required coursework but must be completed **within the first 12 months** after the student's initial registration in the Ph.D. program. The student must complete a Ph.D. Proposed Program of Study Form and have it approved by the advisor and the department before starting the candidacy exam process.

3 **No later than 16 months** after the students initial registration in the Ph.D. program, the Ph.D. candidate will be required to submit a detailed research proposal to the Ph.D. Advisory Committee. The proposal must document the research objectives, relevant background literature, required experimental, analytical or computational approaches, and projected timetable for completion of the steps necessary in the research. The proposal is normally about 10,000 words (40 pages), not including the bibliography. The candidate will be required to make an oral presentation of the proposal (approximately 20 minutes), followed by questions directly related to the proposal. Maximum duration of the question period will be 2 hours.

4 The final examination for the Ph.D. degree proceeds in two (2) stages:
- Examination of the candidate's thesis by an internal and external examiner;
- Oral examination of the candidate by all examiners on the subject of the thesis and any matters relating thereto.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Electrical and Computer Engineering, M.Eng.

Electrical & Computer Engineering
Head: Dr. Derek Oliver
Associate Head: Dr. E. Hossain (Graduate programs); Dr. D. McNeill (Computer); Dr. C. Ho (Electrical)
Campus Address/General Office: E2-390 Engineering
Telephone: 204-474 9603
Email Address: umece@umanitoba.ca
Website: umanitoba.ca/engineering/electrical-and-computer-engineering (https://umanitoba.ca/engineering/electrical-and-computer-engineering/)
Academic Staff: Please refer to the Electrical and Computer Engineering (https://umanitoba.ca/engineering/faculty-staff/electrical-and-computer-engineering/) website for Faculty information.

Electrical & Computer Engineering (ECE) Program Information

The department offers programs leading to the Master of Engineering, Master of Science, and Doctor of Philosophy. Students may select either a specialized research-oriented activity, an interdisciplinary program, or collaboration with industry or research centres in Canada.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

ECE M.Eng. Admission Requirements

A student must normally be employed as an engineer in Manitoba, and hold a Bachelor of Science Degree in Electrical or Computer Engineering (or its equivalent) from a recognized university. The department minimum GPA requirement for entrance is 3.5.

Students must also receive tentative approval from a professor in the Department of Electrical & Computer Engineering prior to applying to the graduate program.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Students applying to a Pre-Master's program in the Department of Electrical & Computer Engineering are evaluated on a case-by-case basis with the permission of the Prospective Academic Advisor (professor) and Department. Students who do not meet the minimum GPA requirement of 3.0 / Department's requirement of 3.5; do not pass an English language exam; and do not hold a B.Sc. in a subject approved by the department will not be accepted.

Note: The Pre-Master's or Qualifying Student program is not meant for those students with GPAs below the University's or Department's minimum requirement or who have not passed an English Language Examination.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the ECE M.Eng. program of study (https://umanitoba.ca/explore/programs-of-study/electrical-and-computer-engineering-msc-meng/) page.

Degree Requirements

This program is meant to satisfy the particular needs of students and practicing engineers wishing to extend their studies on a broad basis of coursework and an engineering project.

The M.Eng. program in Electrical and Computer Engineering requires a minimum of 24 credit hours of advisor-approved coursework as follows:

- **Minimum:** 9 credit hours at or above the 7000 level from the ECE department
- **Maximum:** 9 credit hours of elective courses from the ECE department at or above the 4000 level and a maximum of 12 credit hours from other departments at or above the 3000 level
- **Project:** The student is required to complete an advisor-approved engineering project and proposal. The effort involved in this project should be at least the equivalent of 6 credit hours of coursework.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECE 7XXX	ECE Courses designated 7000 level or higher [1-4]	9
Select courses from the following: [1-4]		9
ECE 7XXX	ECE Courses designated 7000 level or higher	
Related Studies 7XXX	Related Studies Courses designated 7000 level or higher	
Select courses from the following: [1-4]		6
ECE 4XXX	ECE Courses designated 4000 level or higher	
XXX 3000	Courses designated 3000 level or higher outside of ECE	
	Hours	**24**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**24**

1 TBD (Course must be in the student's research field) – Must be approved by Academic Advisor. With permission from the Academic Advisor and Department students may take courses outside of ECE.

2 A **minimum of at least 9 credit hours** at or above the 7000-level is required from the **Department of Electrical and Computer Engineering**.

3 A **minimum of 18 credit hours** at the 7000-level or higher is required. Of these 18-Credit Hours :

- **9 credit hours** must be from the ECE Graduate Program
- **9 credit hours** may come from other Departments relevant to the student course of study
- It is permissible for the **entire 24 credit hours, at the 7000-level or higher, from the Department of Electrical & Computer Engineering**

4 Up to 6 credit hours may come from the undergraduate program:

- **ECE Department:** At or above the 400/4000 level may make up the remainder of the required credit-hours
- **Other Department:** (within the student's study area): at or above the 300/3000 level may make up the remainder of the required credit-hours

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly

admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Electrical and Computer Engineering, M.Sc.

Electrical & Computer Engineering
Head: Dr. Derek Oliver
Associate Head: Dr. E. Hossain (Graduate programs); Dr. D. McNeill (Computer); Dr. C. Ho (Electrical)
Campus Address/General Office: E2-390 Engineering
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Website: umanitoba.ca/engineering/electrical-and-computer-engineering (https://umanitoba.ca/engineering/electrical-and-computer-engineering/)
Academic Staff: Please refer to the Electrical and Computer Engineering (https://umanitoba.ca/engineering/faculty-staff/electrical-and-computer-engineering/) website for Faculty information.

Electrical & Computer Engineering (ECE) Program Information

The department offers programs leading to the Master of Engineering, Master of Science, and Doctor of Philosophy. Students may select either a specialized research-oriented activity, an interdisciplinary program, or collaboration with industry or research centres in Canada.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

ECE M.Sc. Admission Requirements

A student must normally hold a B.Sc. in Electrical or Computer Engineering (or its equivalent), and receive tentative approval from a professor in the Department of Electrical & Computer Engineering prior to applying to the graduate program. The Department minimum GPA requirement for entrance is 3.5.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Students applying to a Pre-Master's program in the Department of Electrical & Computer Engineering are evaluated on a case-by-case basis with the permission of the Prospective Academic Advisor (professor) and Department. Students who do not meet the minimum GPA requirement of 3.0 / Department's requirement of 3.5; do not pass an English language exam; and do not hold a B.Sc. in a subject approved by the department will not be accepted.

Note: The Pre-Master's or Qualifying Student program is not meant for those students with GPAs below the University's or Department's minimum requirement or who have not passed an English Language Examination.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the ECE M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/electrical-and-computer-engineering-msc-meng/) page.

Degree Requirements

The M.Sc. program in Electrical and Computer Engineering requires a minimum of 12 credit hours of advisor-approved coursework (12 credit hours, 7000 level or higher) as follows:

- 6 credit hours must be at or above the 7000 level and from the ECE Department
- 6 credit hours must be at or above the 7000 level and may be from other Departments

An M.Sc. thesis, based on research work normally carried out at this university, is required.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
ECE 7XXX	ECE Courses designated 7000 level or higher [1]	6
	Hours	**6**
Year 2		
ECE 7XXX	ECE Courses designated 7000 level or higher [1]	6
GRAD 7000	Master's Thesis	0
	Hours	**6**
	Total Hours	**12**

[1] TBD (Course must be in the student's research field) – Must be approved by Academic Advisor. With permission from the Academic Advisor and Department students may take courses outside of ECE.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Electrical and Computer Engineering, Ph.D.

Electrical & Computer Engineering
Head: Dr. Derek Oliver
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Academic Staff: Please refer to the Electrical and Computer Engineering (https://umanitoba.ca/engineering/faculty-staff/electrical-and-computer-engineering/) website for Faculty information.

Electrical & Computer Engineering (ECE) Program Information

The department offers programs leading to the Master of Engineering, Master of Science, and Doctor of Philosophy. Students may select either a specialized research-oriented activity, an interdisciplinary program, or collaboration with industry or research centres in Canada.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

ECE Ph.D. Admission Requirements

The student must normally hold a Master of Science degree in Electrical or Computer Engineering; have received tentative approval from a professor in the Department of Electrical & Computer Engineering; and, have a minimum GPA of 3.5; in order to apply to the graduate program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the ECE Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/electrical-and-computer-engineering-phd/) page.

Degree Requirements

The Ph.D. program in Electrical and Computer Engineering depends on student classification as follows:

- **M.Sc.** degree in Electrical or Computer engineering and who have been admitted directly into the Ph.D. program
  - minimum of 12 credit hours of Advisory Committee-approved coursework is required
  - courses must be at the 7000 level or higher
  - at least 6 of the 12 credit hours must be from the ECE department
- **B.Sc.** degree in Electrical or Computer Engineering and who are
  - recommended for transfer into the Ph.D. program from the ECE M.Sc. program at this university
  - minimum of 24 credit hours of Advisory Committee-approved coursework is required
    - 9 credit hours MUST be at or above the 7000 level
    - 6 credit hours may be
      - Other department: at or above the 3000 level **or**
      - ECE department: 4000 level elective courses
      - at least 12 of the 24 credit hours **must** be from the ECE department
      - In the case of a transfer from an M.Sc. program to the ECE Ph.D. program credit may be given for approved coursework completed at the M.Sc. level
- **Transferred from the M.Sc program**
  - Please see info at http://umanitoba.ca/faculties/engineering/departments/ece/curr_students/graduate/transfer-to-phd.html
- **For all other categories of students**
  - a minimum of 24 credit hours of advisory committee-approved coursework is required if the student does not hold a M.Sc., otherwise 12 credit hours is required
    - of which 9 credit hours must be at or above the 7000 level
    - the balance of 6 credit hours must be at or above the 3000 level from other departments or 4000 level elective courses from the ECE department
    - at least 12 of the 24 credit hours must be from the Dept. of Electrical and Computer Engineering department
- A Ph.D. thesis, which is based on research work normally carried out at this university, is required.

Expected Time to Graduate: 3.5 years

Progression Chart

Ph.D. Students Holding a Master's Degree

Course	Title	Hours
Years 1-2		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 8010	Doctoral Candidacy Examination	0
ECE 7XXX	ECE Courses designated 7000 level or higher [1]	12
	Hours	**12**
Year 2		
Ph.D. Thesis Proposal Presentation		0
	Hours	**0**
Years 3-6		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

1 TBD (Course must be in the student's field of research) – Must be approved by Academic Advisor. With permission from the Academic Advisor and Department students may take courses outside of ECE.

Ph.D. Students Without a Master's Degree

Course	Title	Hours
Years 1-2		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Years 1-2.5		
ECE 7XXX	ECE Courses designated 7000 level or higher [1,2]	12-24
ECE 4XXX	ECE Courses designated 4000 level or higher outside ECE, 3000 or higher [1,3]	6
	Hours	**18-30**
Year 2		
Ph.D. Thesis Proposal Presentation		
	Hours	**0**
Years 3-6		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**18-30**

1 TBD (Course must be in the student's field of research) – Must be approved by Academic Advisor.

2 At least 12 of the 24 credit hours **must** be from the ECE Department.

3 **Up to** 6-credit hours may be taken from another department.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Mechanical Engineering, M.Eng.

Mechanical Engineering
Head: Dr. Olanrewaju Ojo
Grad Chair: Dr. Yunhua Luo
Campus Address/General Office: E2-327 Engineering Bldg
Telephone: 204-474-6540
Fax: 204-275-7507
Email Address: mech.gradprogram@umanitoba.ca
Website: umanitoba.ca/engineering/mechanical (https://umanitoba.ca/engineering/mechanical/)
Academic Staff: Please refer to the Mechanical Engineering website (https://umanitoba.ca/engineering/faculty-staff/mechanical-engineering/) for current staff listing.

Mechanical Engineering Program Information

The graduate program in the Department of Mechanical Engineering offers a world-class graduate experience leading to degrees in Doctor of Philosophy, Master of Science and Master of Engineering.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Mechanical Engineering M.Eng. Admission Requirements

The Master of Engineering program mainly provides working engineers and internationally trained engineers an opportunity to continue their studies and specialize in an area of interest. Applicants must have a minimum of a B.Sc. degree in Engineering. In exceptional cases, based on the candidate's professional experience, this requirement may be waived by the department.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mechanical Engineering M.Eng. program of study (https://umanitoba.ca/explore/programs-of-study/mechanical-engineering-msc-meng/) page.

Degree Requirements

The minimum requirement for the award of the M.Eng. degree is 24 credit hours of coursework with at least 9 credit hours at the 7000 level. Of the 24 credit hours, 6 credit hours will be assigned to an approved project and report (GRAD 7050).

All coursework and the project proposal must be approved by the student's advisor. It is the Department's policy that graduate students shall take no more than 6 credit hours of graduate level courses from one professor.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**0**
Years 1-2		
Courses at the 7000 level or higher		9
Courses at the 3000 or 4000 level or higher		9
	Hours	**18**
Year 2		
GRAD 7050	M.Eng. Project and Report	6
	Hours	**6**
	Total Hours	**24**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

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Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

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All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Mechanical Engineering, M.Sc.

Mechanical Engineering
Head: Dr. Olanrewaju Ojo
Grad Chair: Dr. Yunhua Luo
Campus Address/General Office: E2-327 Engineering Bldg
Telephone: 204-474-6540
Fax: 204-275-7507
Email Address: mech.gradprogram@umanitoba.ca
Website: umanitoba.ca/engineering/mechanical (https://umanitoba.ca/engineering/mechanical/)
Academic Staff: Please refer to the Mechanical Engineering website (https://umanitoba.ca/engineering/faculty-staff/mechanical-engineering/) for current staff listing.

Mechanical Engineering Program Information

The graduate program in the Department of Mechanical Engineering offers a world-class graduate experience leading to degrees in Doctor of Philosophy, Master of Science and Master of Engineering.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Mechanical Engineering M.Sc. Admission Requirements

Applicants are normally required to hold a Bachelor's degree in Mechanical Engineering or related field from a recognized university. Applicants with other engineering degrees or with honours degrees in related areas may also be accepted at the discretion of the department. In certain cases (e.g., non-engineering graduates), acceptance may be subject to satisfying certain requirements. Contact the department for more information.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mechanical Engineering M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/mechanical-engineering-msc-meng/) page.

Degree Requirements

A minimum of 12 credit hours of coursework will be required with at least nine credit hours at the 700/7000 level as approved by the student's advisor. The minimum time is one calendar year of full-time study and research and must be spent on campus. All candidates for the M.Sc. degree are required to register in MECG 7890. The M.Sc. degree will not be awarded without a passing grade in MECG 7890.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**0**
Years 1-2		
Courses at the 7000 level		9
Courses at the 3000 or 4000 level		3
	Hours	**12**

Year 2		
GRAD 7000	Master's Thesis	0
MECG 7890	M.Sc. Graduate Research Seminar [1]	1
	Hours	**1**
	Total Hours	**13**

[1] The M.Sc. degree will not be awarded without a passing grade in MECG 7890, which involves a seminar presentation on research being conducted by the student.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

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Supplementary Regulations

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All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Mechanical Engineering, Ph.D.

Mechanical Engineering
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Grad Chair: Dr. Yunhua Luo
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Telephone: 204-474-6540
Fax: 204-275-7507
Email Address: mech.gradprogram@umanitoba.ca
Website: umanitoba.ca/engineering/mechanical (https://umanitoba.ca/engineering/mechanical/)
Academic Staff: Please refer to the Mechanical Engineering website (https://umanitoba.ca/engineering/faculty-staff/mechanical-engineering/) for current staff listing.

Mechanical Engineering Program Information

The graduate program in the Department of Mechanical Engineering offers a world-class graduate experience leading to degrees in Doctor of Philosophy, Master of Science and Master of Engineering.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Mechanical Engineering Ph.D. Admission Requirements

Admission to the Ph.D. program is normally from the Master's degree level. Master's students making exceptional progress while enrolled in their program may be transferred to the Ph.D. program upon the consent of the department head based on recommendations from the student's advisor and an appointed selection committee who investigate the student's qualifications and suitability for Ph.D. study.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Mechanical Engineering Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/mechanical-engineering-phd/) page.

Degree Requirements

The Ph.D. program consists of coursework, original research and a thesis. A minimum of 12 credit hours of 7000-level coursework is required beyond the Master's degree. The program of study must be approved by the student's advisor, the advisory committee and the Department Head.

All candidates of the Ph.D. are required to register in MECG 7900. The Ph.D. will not be awarded without a passing grade in MECG 7900, which involves a seminar presentation on research being conducted by the student.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**0**
Years 1-4		
Courses at the 7000 level or higher		12
	Hours	**12**
Year 2		
GRAD 8010	Doctoral Candidacy Examination	0
MECG 7900	Ph.D. Graduate Research Seminar [1]	1
	Hours	**1**
Years 2-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**13**

[1] The Ph.D. degree will not be awarded without a passing grade in MECG 7900, which involves a seminar presentation on research being conducted by the student.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Courses are subject to cancellation if there is insufficient enrolment. Courses with insufficient enrolment may be cancelled the first week of classes. Not all courses will be offered each year — contact the department for courses that will not be offered. All returning and newly admitted students must see an academic advisor or the department head prior to attempting to register.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

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All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Rady Faculty of Health Sciences Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biochemistry and Medical Genetics, M.Sc. (p. 320)	2	11	
Biochemistry and Medical Genetics, Ph.D. (p. 322)	4	11	
Community Health Sciences, M.P.H. (p. 323)	2	30	
Community Health Sciences, M.Sc. (p. 325)	2-4	21	
Community Health Sciences, Ph.D. (p. 327)	4-6	18-24	
Genetic Counselling, M.Sc. (p. 329)	2	30	
Human Anatomy and Cell Science, M.Sc. (p. 330)	2-3	9	
Human Anatomy and Cell Science, Ph.D. (p. 332)	4-5	6	

Immunology, M.Sc. (p. 333)	2-3	9
Immunology, Ph.D. (p. 334)	4-5	9,15,18
Medical Microbiology & Infectious Diseases, M.Sc. (p. 336)	2-3	12
Medical Microbiology and Infectious Diseases, Ph.D. (p. 338)	5-6	6-12
Micro-Diploma in Science Communication (p. 339)		6
Nursing, M.N. (p. 298)	2	21-45
Nursing, Ph.D. (p. 300)	4	12
Occupational Therapy, M.O.T. (p. 304)	2	107
Oral and Maxillofacial Surgery, M.Dent. (p. 310)	4	49
Oral Biology, M.Sc. (p. 312)	2	12
Oral Biology, Ph.D. (p. 313)	4	12
Orthodontics and Dentofacial Orthopedics, M.Dent. (p. 314)	3	40
Pathology, M.Sc. (p. 342)	2-4	9-33.5
Pathology and Laboratory Medicine, Ph.D. (p. 340)	4	12
Pediatric Dentistry, M.Dent. (p. 315)	3	64
Pediatrics and Child Health, M.Sc. (p. 343)	2	12
Pediatrics and Child Health, Ph.D. (p. 345)	4	15
Periodontics, M.Dent. (p. 317)	3	58
Pharmacology and Therapeutics, M.Sc. (p. 346)	2-3	9-12
Pharmacology and Therapeutics, Ph.D. (p. 347)	3-5	6-12
Pharmacy, M.Sc. (p. 302)	2	12
Pharmacy, Ph.D. (p. 303)	5	12
Physical Therapy, M.P.T. (p. 307)	2	103
Physician Assistant Studies, M.P.A.S. (p. 349)	2-3	86
Physiology & Pathophysiology, M.Sc. (p. 350)	2	9
Physiology & Pathophysiology, Ph.D. (p. 351)	4	9
Prosthodontics, M.Dent. (p. 318)	3	99
Rehabilitation Sciences, M.Sc. (p. 309)	2	12
Surgery, M.Sc. (p. 352)	2	12

College of Nursing

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Nursing, M.N. (p. 298)	2	21-45	
Nursing, Ph.D. (p. 300)	4	12	

Nursing, M.N.

Nursing
Associate Dean Graduate Programs: Donna Martin; RN, PhD
Campus Address/General Office: 277 Helen Glass Centre for Nursing
Telephone: 204-474-7452
Fax: 204-474-7682
Email Address: nursing@umanitoba.ca
Website: umanitoba.ca/nursing/ (https://umanitoba.ca/nursing/)
Academic Staff: Please refer to the Nursing website (https://umanitoba.ca/nursing/faculty-staff/) for Academic staff information.

Nursing Program Information

The College of Nursing currently offers programs leading to the Master of Nursing degree and a Doctor of Philosophy in Nursing. The MN program streams are Education, Administration, Clinical, and Nurse Practitioner. The MN program provides students the opportunity to develop expertise that enables them to respond in an ever-changing, dynamic, and fluid practice setting, as well as prepares students for possible doctoral studies.

The PhD in Nursing promotes the development of outstanding scholars who will engage in programs of research that will positively influence the health and health care of populations.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Nursing M.N. Admission Requirements

Applicants must possess:

- A baccalaureate degree in nursing, mental health nursing or psychiatric nursing or its equivalent from an approved or accredited university. In exceptional circumstances, applicants with a degree in another discipline may be considered on a case by case basis providing the applicant is a Registered Nurse (RN) or Registered Psychiatric Nurse (RPN). RPN applicants are not eligible for the Nurse Practitioner stream.
- Completion of a Research Methods course and an Introductory Statistics course with a minimum grade of C+ in each course. The content of specific courses may be reviewed to determine whether these criteria are met.
- Proof of active practicing nurse registration as either a Registered Nurse or Registered Psychiatric Nurse is required by the application deadline. Applicants from other Canadian provinces/territories must have active practicing registration with their provincial or territorial regulatory body. Applicants from other countries may apply provided they have active practicing nurse status in their home country.

Nurse Practitioner Stream - Only Registered Nurses are eligible for application to the Nurse Practitioner Stream. Applicants from outside of Manitoba applying to the Nurse Practitioner stream must provide proof of active practicing RN registration in Canada no later than the application deadline. Successful applicants must provide proof of active practicing registration with the College of Registered Nurses of Manitoba (CRNM) and maintain this registration for the duration of the program.

Applicants with Indigenous ancestry in Canada who meet all entry requirements will be given priority for up to 20% of the enrolment quota; proof of Indigenous ancestry is required.

Students admitted to the Master of Nursing program must meet the non-academic requirements of: Immunization, criminal record search including vulnerable sector search, child abuse registry check, adult abuse registry check, CPR certification, WRHA Personal Health Information Act (PHIA) training, and respirator mask-fit testing as prescribed by the College of Nursing, and submit to the College of Nursing by the date established by the College of Nursing. Proof of an annual influenza vaccination is required of all students by the published deadline in the fall. Visit the College of Nursing website for full details on the non-academic requirements.

As per the Faculty of Graduate Studies requirements, a successfully completed English Language Proficiency Test is required of all applicants unless they have received a high school diploma or university degree from Canada or one of the countries listed on the English Language Proficiency Test Exemption List. If applicable, this score is required as a basis for admission and applicants will NOT be accepted subject to receipt of an acceptable score. Documented proof of either the above must be submitted with the application for admission. Please note: scores more than two years old are not acceptable.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Nursing M.N. (https://umanitoba.ca/explore/programs-of-study/nursing-mn/) or Nurse Practitioner M.N. (https://umanitoba.ca/explore/programs-of-study/nursing-nurse-practitioner-mn/) program of study pages.

Degree Requirements

The Master's Program in Nursing includes 21 credit hours for students completing a thesis, and 27 credit hours for students completing the course-based capstone project option.

The Nurse Practitioner stream consists of 45 credit hours plus the Clinical Consolidation course.

Expected Time to Graduate: 2-4 years

Progression Chart

Thesis Route

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
NURS 7210	Qualitative Research Methods in Nursing	3
NURS 7220	Quantitative Research Methods in Nursing	3
NURS 7320	Philosophy of Nursing Science	3
NURS 7340	Evidence Informed Practice	3
NURS 7352	Leadership in Advanced Practice Nursing	3
	Hours	**15**
Year 2		
NURS 7360	Integrative Focus	6
	Hours	**6**

Year 3		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**21**

[1] Thesis students who have finished their coursework and are working on their thesis (research data collection, writing etc.) are required to register for GRAD 7000, as well as GRAD 7020 for each term until they graduate.

This course progression reflects full-time student status. Students may elect to study full-time or part-time. All courses use blended delivery with biweekly in-class seminars alternated with online course delivery. Other additional optional graduate level coursework, as approved by the advisor, is also possible.

Capstone Project Route

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
NURS 7210	Qualitative Research Methods in Nursing	3
NURS 7220	Quantitative Research Methods in Nursing	3
NURS 7320	Philosophy of Nursing Science	3
NURS 7340	Evidence Informed Practice	3
NURS 7352	Leadership in Advanced Practice Nursing	3
	Hours	**15**
Year 2		
Select one of the following options:		12
Option A:		
NURS 7360	Integrative Focus (6 credit hours)	
Select 6 additional credit hours of elective coursework		
Option B:		
Select 12 credit hours of elective coursework		
	Hours	**12**
Year 3		
NURS 7120	Capstone Project	0
	Hours	**0**
	Total Hours	**27**

[1] A student must complete all of the required coursework in their program before registering for the Capstone Project. Capstone project students who have finished their course work are required to register for NURS 7120, as well as GRAD 7020 for each term until they graduate.

Notes:

- This course progression reflects full-time student status. Students may elect to study full-time or part-time. All courses use blended delivery.
- A maximum of 6 credit hours at the 3000 or 4000 level may be taken to meet program requirements, unless special permission has been obtained from the Associate Dean, Graduate Programs, College of Nursing.

Nurse Practitioner Stream

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
NURS 7340	Evidence Informed Practice [1]	3
NURS 7352	Leadership in Advanced Practice Nursing [1]	3
NURS 7402	Advanced Pathophysiology and Therapeutics in Nurse Practitioner Practice	2
NURS 7412	Advanced Health Assessment	3
NURS 7430	Nurse Practitioner 1	6
NURS 7442	Clinical Practice 1	3
NURS 7450	Nurse Practitioner 2	5
NURS 7462	Advanced Practice Nursing in Primary Care Settings	2
	Hours	**27**
Year 2		
NURS 7470	Nurse Practitioner 3	5
NURS 7482	Clinical Practice 2	4
NURS 7490	Nurse Practitioner 4	5
NURS 7502	Clinical Practice 3	4
NURS 7330	Clinical Consolidation (10 weeks of 400 clinical hours) [2]	0
	Hours	**18**
	Total Hours	**45**

[1] Students who completed a Master of Nursing program and have advanced standing in NURS 7340 and or NURS 7352 or equivalent are required to substitute an elective course. This course progression reflects full-time student status. Students may elect to study full-time or part-time. All courses use blended delivery. Courses in the Nurse Practitioner Stream are scheduled in the Fall, Winter, and Summer Terms.

[2] At the end of coursework, there is a clinical consolidations course (400 hours), which facilitates the integration and development of NP clinical skills. Arrangements for clinical practice for each student are organized by the NP Placement Coordinator, in collaboration with the clinical practice course leader and NP Director.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

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All students must successfully complete:

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- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

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- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Nursing, Ph.D.

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Email Address: nursing@umanitoba.ca
Website: umanitoba.ca/nursing/ (https://umanitoba.ca/nursing/)
Academic Staff: Please refer to the Nursing website (https://umanitoba.ca/nursing/faculty-staff/) for Academic staff information.

Nursing Program Information

The PhD in Nursing promotes the development of outstanding scholars who will engage in programs of research that will positively influence the health and health care of populations.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Nursing Ph.D. Admission Requirements

Applicants must possess a Master's degree, preferably in Nursing. Pre-requisites for entry into the PhD Program include the equivalence of the following Master of Nursing (MN) courses: NURS 7320; NURS 7210; and NURS 7220. If pre-requisite education has been evaluated as insufficient, additional course work will be required prior to entry into the College of Nursing doctoral program. Other qualifications will be considered on a case by case basis. Exceptional MN students from the University of Manitoba who wish to apply to the PhD program before completing the MN program may be considered pending completion of NURS 7210, NURS 7220, NURS 7320, and NURS 7340 for a total of 12 credit hours.

Students admitted to the PhD in Nursing Program must meet the non-academic requirements of: Immunization, criminal record search including vulnerable sector search, child abuse registry check, adult abuse registry check, CPR certification, WRHA Personal Health Information Act (PHIA) training, and respirator mask-fit testing as prescribed by the College of Nursing, and submit to the College of Nursing by the date published by the College of Nursing. Proof of an annual influenza vaccination is required of all students by the published deadline in the fall.

Students engaging in research projects in Manitoba that entail specific nurse practice competencies as outlined by the College of Registered Nurses of Manitoba (CRNM) require active registration with the CRNM prior to commencing the project. Students engaging in research projects in other Canadian provinces/territories which entail specific nursing practice competencies as outlined by their provincial/territorial regulatory bodies require proof of active practicing registration in their province/territory. Applicants or students with RN registration outside of Manitoba and who will require RN registration in Manitoba for the purpose of their thesis research are advised to contact the CRNM at www.crnm.mb.ca (http://www.crnm.mb.ca/) prior to application to the PhD in Nursing program.

Applicants with Indigenous ancestry in Canada who meet all entry requirements will be given priority for up to 20% of the enrolment quota; proof of Indigenous ancestry is required.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Nursing Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/nursing-phd/) page.

Degree Requirements

The coursework requirement will consist of a minimum of 12 credit hours of 8000-level coursework:

Course	Title	Hours
NURS 8002	Advanced Philosophy of Nursing Science	3
NURS 8010	Advanced Qualitative Research for Nursing	3
NURS 8020	Advanced Knowledge Translation & Health Care Policy	3
NURS 8030	Doctoral Student Seminars I	0
NURS 8040	Doctoral Student Seminars II	0
NURS 8220	Advanced Quantitative Research Design & Methods in Nursing and Health Care (or Equivalent Course)	3
Note: NURS 8220 has a pre- or co- requisite course: CHSC 7810 Biostatistics for Health and Human Sciences or equivalent.		
Total Hours		**12**

Students admitted to the doctoral program without the prerequisite courses (NURS 7210, NURS 7220, NURS 7320) will be required to complete the prerequisite course(s) in the first two years of their program in addition to the required twelve credit hours of 8000-level course-work and the NURS 8030 and NURS 8040 Doctoral Student Seminars.

Students are expected to take a formal candidacy exam and complete a thesis.

Expected Time to Graduate: 4-6 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
NURS 8002	Advanced Philosophy of Nursing Science	3
NURS 8010	Advanced Qualitative Research for Nursing	3
NURS 8030	Doctoral Student Seminars I	0
	Hours	**6**
Year 2		
GRAD 8010	Doctoral Candidacy Examination [1]	0
NURS 8040	Doctoral Student Seminars II	0
NURS 8020	Advanced Knowledge Translation & Health Care Policy	3
NURS 8220	Advanced Quantitative Research Design & Methods in Nursing and Health Care	3
Note: NURS 8220 has a pre- or co- requisite course: CHSC 7810 Biostatistics for Health and Human Sciences or equivalent.		
	Hours	**6**
Years 3-4		
GRAD 8000	Doctoral Thesis [2]	0
	Hours	**0**
	Total Hours	**12**

1 Students are expected to take a formal candidacy exam, normally within 6 months of completing coursework or before the end of the second year. Students should register in GRAD 8010 in the term that they expect to complete the candidacy examination. If the exam is not completed in that term, re-registration is required.

2 Students who have finished their course work and Doctoral Candidacy Examination are required to register for GRAD 8000 along with GRAD 8020 for every remaining term (Fall, Winter and Summer) that they are in the PhD in Nursing program, until they graduate.

Notes:

- This course progression reflects full-time student status. Students may elect to study full-time or part-time. All courses use blended delivery.
- Students may augment their learning, as negotiated with their advisors, with other elective courses to enhance theoretical, clinical, methodological, statistical, and/or policy knowledge.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

College of Pharmacy

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Pharmacy, M.Sc. (p. 302)	2	12	
Pharmacy, Ph.D. (p. 303)	5	12	

Pharmacy, M.Sc.

Pharmacy
Dean: Dr. Lalitha Raman-Wilms
Associate Dean(s): Dr. Lavern Vercaigne (Academic) Dr. Hope Anderson (Research)
Grad Chair: Dr. Silvia Alessi-Severini
Campus Address/General Office: Apotex Centre, 750 Mc Dermot Avenue
Telephone: 204-474-9306
Fax: 204-789-3744
Email Address: pharmacy@umanitoba.ca
Website: umanitoba.ca/pharmacy/ (https://umanitoba.ca/pharmacy/)
Academic Staff: Please see the Pharmacy website (https://umanitoba.ca/pharmacy/faculty-staff/) for Academic staff information.

Pharmacy Program Information

The College offers both Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Pharmacy M.Sc. Admission Requirements

- The applicant must negotiate with faculty researchers for a traineeship position.
- The applicant must hold a four-year Bachelor of Science degree in Pharmacy or a science degree with a cumulative GPA of a least 3.0 (4.5 scale), based on the last 60 credit hours (or two full years or equivalent) of university study.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pharmacy M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/pharmacy-msc/) page.

Degree Requirements

All programs are established on an individual basis; the following general principles apply:

- A minimum of 12 credit hours of coursework plus a thesis or practicum. The minimum must include at least 6 credit hours at the 7000 level with the balance of the coursework at the 3000 level or above. A maximum of 24 credit hours of coursework is allowed toward the thesis/practicum based Master's program.
- Students must complete PHRM 7160 in the first year of their program. Students may subsequently take PHRM 7170 as an elective to meet their credit hour requirements.
- Students registered full time in the M.Sc. program, are required to attend an participate in the Pharmacy Graduate Seminar Series, where they must present at least one research seminar annually.
- Students are expected to enroll on a 12-month basis and conduct research during the summer months.
- The College of Pharmacy offers a concentration in Pharmacoepidemiology. The course requirements include 15 credit hours in the M.Sc. program (9 CH of core and 6 CH of electives).

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7020	Master's Re-registration	0
PHRM 7160	Pharmacy Seminar 1 MSc	3
	Hours	**3**
Years 1-2		
Select 9 credit hours in other courses at 7000 level (not restricted to PHRM courses)		9
	Hours	**9**
Year 2		
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
	Hours	**0**
	Total Hours	**12**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must determine their program courses with their advisor/advisory committee.

Not all courses are offered each year.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Pharmacy, Ph.D.

Pharmacy
Dean: Dr. Lalitha Raman-Wilms
Associate Dean(s): Dr. Lavern Vercaigne (Academic) Dr. Hope Anderson (Research)
Grad Chair: Dr. Silvia Alessi-Severini
Campus Address/General Office: Apotex Centre, 750 Mc Dermot Avenue
Telephone: 204-474-9306
Fax: 204-789-3744
Email Address: pharmacy@umanitoba.ca
Website: umanitoba.ca/pharmacy/ (https://umanitoba.ca/pharmacy/)
Academic Staff: Please see the Pharmacy website (https://umanitoba.ca/pharmacy/faculty-staff/) for Academic staff information.

Pharmacy Program Information

The College offers both Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Pharmacy Ph.D. Admission Requirements

- The applicant must negotiate with faculty researchers for a traineeship position.
- Applicants must hold a Master of Science degree in Pharmacy or related field from a recognized university with a cumulative GPA of at least 3.0 (4.5 scale), based on the last 60 credit hours (or two full years or equivalent) of university study.

Application Information

- Students should complete and submit their online application with supporting documentation by the date indicated on the Pharmacy Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/pharmacy-phd/) page.

Degree Requirements

All programs are established on an individual basis; the following general principles apply:

- Where admission to the Ph.D. is directly from a Master's Degree, a minimum of 12 credit hours at the 7000 level or higher plus a thesis is required. For those students who hold a Master's degree, a maximum of 24 credit hours of course work is allowed toward the Ph.D. program.
- Students must complete PHRM 7260 in the first year of their program. Students may subsequently take PHRM 7270 as an elective to meet their credit hour requirements.
- Students registered full time in the Ph.D. program are required to attend and participate in the Pharmacy Graduate Seminar Series, where they must present at least one research seminar annually.
- Students who transfer from the M.Sc. to the Ph.D. program in Pharmacy, having completed PHRM 7160, may take PHRM 7270 as an elective to meet their credit hour requirements. Normally, students will not be permitted to take PHRM 7260 unless their research project is notably different from that presented in PHRM 7160. In that case, the student must obtain approval from their advisor and Chair of the PGSC to take PHRM 7260.
- Students are expected to enroll on a 12-month basis and conduct research during the summer months.
- Students registered in the M.Sc. program who have made excellent progress over the first 12 months in their program may be considered for transfer to the Ph.D. program. The transfer must be completed within 16 months (4 terms) of the student's commencement in the Master's program.
- The College of Pharmacy offers a concentration in Pharmacoepidemiology. The course requirements for students entering the Ph. D. program already holding a Master degree, include 12 credit hours in the Ph.D. (6 CH of core and 6 CH of elective). Students transferring from the Master's to the Ph.D. will require a total of 24 CH to complete their program.

Expected Time to Graduate: 4 years

Progression Chart

** Where admission to the Ph.D. is directly from a Master's degree*

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 8020	Doctoral Re-registration	0
PHRM 7260	Pharmacy Seminar 1 PhD	3
	Hours	**3**
Years 1-5		
Select courses designated 7000 or above to be completed during the program (not restricted to PHRM courses)		9
	Hours	**9**
Year 2		
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
Year 3		
GRAD 8020	Doctoral Re-registration	0

GRAD 8010	Doctoral Candidacy Examination	0
	Hours	**0**
Years 4-5		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

Notes:

- Please note students transitioning from the MSc to PhD program will vary from the progression charts listed above.
- Students must continue their enrollment in GRAD 7020 and GRAD 8020 if their program length varies from the above charts.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All students in the graduate program must determine their program courses with their advisor/advisory committee.

Courses must be listed on the Program of Study Form.

Not all courses are offered each year.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

College of Rehabilitation Sciences

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Occupational Therapy, M.O.T. (p. 304)	2	107	
Physical Therapy, M.P.T. (p. 307)	2	103	
Rehabilitation Sciences, M.Sc. (p. 309)	2	12	

Occupational Therapy, M.O.T.

Occupational Therapy
Dean: Dr. Reg Urbanowski
Head: Dr. Leanne Leclair
Campus Address/General Office: R106-771 McDermot Avenue
Telephone: 204-789-3897
Fax: 204-789-3927
Email Address: CORS.MOTprogram@umanitoba.ca
Website: umanitoba.ca/rehabilitation-sciences/occupational-therapy (https://umanitoba.ca/rehabilitation-sciences/occupational-therapy/)
Academic Staff: Please refer to the Occupational Therapy website (https://umanitoba.ca/rehabilitation-sciences/faculty-staff/#department-of-occupational-therapy) for Academic staff information.

Occupational Therapy Program Information

The Master of Occupational Therapy is a professional practice degree that can be obtained through participation in either a Regular program or an Accelerated program option. The Regular program is for individuals who do not have a previous degree in occupational therapy. The Accelerated program is for occupational therapists who have a B.M.R. (O.T.) degree or equivalent.

The Occupational Therapy program maintains accreditation through the Canadian Association of Occupational Therapists.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.O.T. Admission Requirements

REGULAR PROGRAM

Completion of a previous undergraduate degree with a minimum B average in the last 60 credit hours of study, and completion of all program prerequisite courses or approved alternates with no grade in prerequisites below a B. Prerequisite courses include all of the courses listed below or equivalents[1] approved by the Admissions Committee:

- Anatomy of the Human Body
- Physiology of the Human Body
- Minimum 3 credit hours in Psychology
- Minimum 3 credit hours in Social Sciences or Indigenous content (2023-2025)
- Minimum 3 credit hours in Indigenous content (2026)

[1] Equivalent academic courses completed at the University of Manitoba or recognized universities elsewhere (http://umanitoba.ca/rehabsciences/ot/ot_eligibility.html) will be considered.

Completion of the CASPer Test administered by Acuity Insights.

A combination of GPA (last 60 credit hours) and CASPer score will be used to determine who will be invited for an interview.

This program includes a Canadian Indigenous Peoples priority category. Please see the M.O.T. program (https://umanitoba.ca/rehabilitation-sciences/occupational-therapy/) webpage for additional information specific to this category and other requirements.

ACCELERATED PROGRAM

Completion of a B.M.R.(O.T.) degree or equivalent, with a minimum B average in the last 60 credit hours of study, completion of an additional 42 credit hours of non-O.T. degree credits, and evidence of having passed the Canadian Association of Occupational Therapists (CAOT) certification examination and/or eligibility for registration in Manitoba by the College of Occupational Therapists of Manitoba (COTM). Applicants to the Accelerated program are advised to contact the Head of the Occupational Therapy Department prior to applying as admission to the program is dependent on the resources available in any given year.

Please consult the M.O.T. program of study (https://www.umanitoba.ca/explore/programs-of-study/occupational-therapy-mot/#admission-requirements) page for further information.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.O.T. program of study (https://www.umanitoba.ca/explore/programs-of-study/occupational-therapy-mot/#admission-requirements) page.

Degree Requirements

Students in the M.O.T. **Regular program** must complete 107 credit hours of coursework. All academic and fieldwork courses must be successfully completed in order to graduate.

Students in the M.O.T. **Accelerated program** will be required to take 12 credit hours of academic coursework from the M.O.T. program or equivalent. Six of these credit hours are to be OT 7752 Critical Inquiry Research Project or equivalent.

Fieldwork education is an integral part of the M.O.T. Regular program. Field placement experiences are integrated throughout the program and include 1 four-week, 2 eight-week and 1 six-week experience. Field placements mostly occur in Manitoba and Saskatchewan. All students should be prepared to travel out of Winnipeg for **a minimum** of one placement during the course of the program.

Occupational Therapy students are required to provide a health history and immunization record. A student will not be permitted to attend fieldwork placements until all health, immunization, CPR, mask fit and records check requirements are met.

Health Requirements

Standard Health Record Form Packages are sent to new occupational therapy students upon acceptance into the program. New students in Occupational Therapy are required to return forms to their department by dates published yearly in the Health Record Form Packages. Second year students are required annually to review and update immunizations as necessary. Additional information about the certification and records checks requirements outlined below is sent to new applicants upon acceptance into the program.

Cardiopulmonary Resuscitation Certification

All students in the M.O.T. program are required to obtain certification in cardiopulmonary resuscitation. Certification must be through a Heart and Stroke Foundation certified course at the level of Basic Life Support - BLS Provider or higher (Advanced Cardiac Life Support - ACLS). New students in the program must provide proof of certification within the first 2 weeks of classes of the academic year in which they commence classes. This certification must have an issue date on or after August 1 of the year the student commences classes in the program. Second year students must provide proof of re-certification with an issue date on or after August 16 of their second year in the program. Certification must remain current for all fieldwork experiences.

Mask Fit Certification

Clinical/fieldwork education sites require students to maintain mask fit certification. Information on acquiring this certification is provided to new students upon admission. All students are required to maintain mask fit certification throughout the program.

Criminal Record Check, Adult Abuse Registry Check and Child Abuse Registry Check

Clinical/fieldwork education sites require that students produce a completed Criminal Record Check (including a vulnerable sector screen), Adult Abuse Registry Check and a Child Abuse Registry Check. New students in the M.O.T. program must provide results for a Criminal Record Check (including a vulnerable sector screen) within the first 2 weeks of classes of the academic year in which they commence classes. First year students should ensure that the Criminal Records Check has an issue date of July 1 or later in the year in which they commence the program.

Within the first two weeks of the program, incoming students will apply for an Adult Abuse Registry Check and a Child Abuse Registry Check through the M.O.T. program. Further information is provided to incoming students upon their acceptance to the program. Second year students must provide updated results of their Criminal Records Check by October 16 of their second year in the program. The Criminal Records Check (with vulnerable sector screen) must have an issue date on or after August 16 of their second year in the program. Within the first month of classes in second year, returning students will apply for an Adult Abuse Registry Check and a Child Abuse Registry Check through the M.O.T. program. Some fieldwork education sites require that checks are no more than 6 months old; students may need to reorder these checks more than once a year.

Professional Designation and Registration

Graduates from the M.O.T. program have the degree designation M.O.T. It is important to note that occupational therapy is a regulated health profession, by law. To be eligible to practice in Manitoba, graduates must register with the College of Occupational Therapists of Manitoba (COTM) and must register to write the Canadian Association of Occupational Therapists (CAOT) National Certification Examination. Regulations are similar in most other Canadian provinces, in that occupational therapists must be registered with the regulatory body in that jurisdiction and must pass the CAOT National Certification Exam. Writing of the national exam is scheduled three times a year. The University's Occupational Therapy Department provides a list of potential M.O.T. graduates to CAOT to verify their eligibility to write the National Certification Exam. Newly-educated occupational therapists are eligible for registration with COTM (or other provincial regulatory body) as Provisional Occupational Therapists and for employment prior to convocation and/or writing the national exam, provided they have successfully completed all academic and fieldwork requirements for the M.O.T. program, and have provided the appropriate personnel at the regulatory body with a letter of verification from the Head of the Department of Occupational Therapy (students must request these letters). Registration of Provisional Occupational Therapists requires an offer of employment and arranging to have a mentor. For information on the registration process in Manitoba, you can visit the COTM website at www.cotm.ca (http://www.cotm.ca/) or contact them by calling (204) 957-1214. Other provinces have similar provisions to allow some form of registration and thus employment prior to convocation. A listing of provincial regulatory organizations is available from COTM.

Expected Time to Graduate: Regular program - 2 years; Accelerated program - 1 year

Progression Chart

Course	Title	Hours
Year 1		
OT 6100	Human Determinants of Occupational Performance (C & WL)	6
OT 6110	Fundamentals of Occupational Therapy Theory	3
OT 6122	Foundations of Health and Well-being	3
OT 6130	Occupational Therapy Practice Skills 1 (C & WL)	3
OT 6142	Professionalism and Enabling Occupation	7
OT 6190	Fieldwork Preparation	1
OT 6200	Basic Fieldwork	4
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
OT 6300	Analysis of Occupation (C & WL)	4
OT 6310	The Environment and Occupational Performance	4
OT 6320	Health Conditions and Occupational Performance	4
OT 6330	Occupational Therapy Practice Skills 2 (C & WL)	4
OT 6352	Foundations of Evidence-informed Occupational Therapy	4
OT 6400	Intermediate Fieldwork 1	8
GRAD 7020	Master's Re-registration	0
	Hours	**55**
Year 2		
OT 7542	Professionalism and Leadership in Enabling Occupation 1	4
OT 7560	Occupational Therapy Process 1	6
OT 7572	Occupational Therapy Practice Skills 3 (C & WL)	6
OT 7600	Intermediate Fieldwork 2	8
OT 7742	Professionalism and Leadership in Enabling Occupation 2	4
OT 7752	Critical Inquiry Research Project	6
OT 7760	Occupational Therapy Process 2	6
OT 7772	Occupational Therapy Practice Skills 4 (C & WL)	6
OT 7800	Advanced Fieldwork	6
GRAD 7020	Master's Re-registration	0
	Hours	**52**
	Total Hours	**107**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All course withdrawals (registration revisions) must be approved by the Department Head.

Course registration information for the incoming first year students will be forwarded to them by the Department/Program Assistant. Returning students will have course registration information sent to their U of M email account.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Professional Unsuitability Bylaw (PUB)

The Master of Occupational Therapy program has a Professional Unsuitability Bylaw (https://umanitoba.ca/health-sciences/rady-faculty-health-sciences-policies/#college-of-rehabilitation-sciences) that sets out the authority of the program's Professional Unsuitability Committee (PUC) and its procedures.

Physical Therapy, M.P.T.

Physical Therapy
Dean: Dr. Reg Urbanowski
Head: Dr. Mark Garrett
Campus Address/General Office: R106-771 McDermot Avenue, Bannatyne Campus
Telephone: 204-789-3897
Fax: 204-789-3927
Email Address: CORS.PTprogram@umanitoba.ca
Website: umanitoba.ca/rehabilitation-sciences/physical-therapy (https://umanitoba.ca/rehabilitation-sciences/physical-therapy/)
Academic Staff: Please refer to the Physical Therapy website (https://umanitoba.ca/rehabilitation-sciences/faculty-staff/#department-of-physical-therapy) for Academic staff information.

Physical Therapy Program Information

The Master of Physical Therapy is an entry-to-practice education credential that is for individuals who do not have a previous degree in physical therapy and/or for those individuals who are not eligible to practice in Canada with their current academic preparation.

The Master of Physical Therapy Program at the University of Manitoba has been accredited by Physiotherapy Education Accreditation Canada (PEAC). The status of Accreditation – Fully Compliant was granted to the program for the period until April 30, 2026.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.P.T. Admission Requirements

Requirements include: completion of a previous undergraduate degree, in any area of study; minimum grade point average of 3.25 in the last 60 credit hours of study; equivalent IB and/or AP courses will be accepted in lieu of prerequisite courses; successful completion of the Multiple Mini-Interview; a minimum grade of a 3.0 or a "B" in the following prerequisite courses:[1]

- Human Anatomy (3 credit hours)
- Human Physiology (3 credit hours)
- Introductory Statistics (3 credit hours)
- Psychology (minimum of 3 credit hours from a Department of Psychology)
- English Literature (minimum of 3 credit hours from a Department of English or a 3 credit hour French Literature course when approved)
- For 2025-2026 a 3 credit hour Indigenous Studies course will be required

[1] All prerequisite courses need to be completed by the Fall term in the year prior to entry. Equivalent academic courses completed at the University of Manitoba or recognized universities elsewhere will be considered.

English Language Proficiency: For those not educated in English, the Department of Physical Therapy complies with the English language requirements established by the University of Manitoba Faculty of Graduate Studies, the Canadian Alliance of Physiotherapy Regulators (http://www.alliancept.org/) and the College of Physiotherapists of Manitoba (http://www.manitobaphysio.com/for-ieps/registration-2/language-requirements/). These minimum scores are required to be admitted into the Faculty of Graduate Studies; to be licensed as a student physical therapist in Manitoba; and to be considered eligible to sit the national Physiotherapy Competency Examination upon graduation. For more details on acceptable English Language Proficiency tests, see the M.P.T. program of study (https://umanitoba.ca/explore/programs-of-study/physical-therapy-mpt/) page.

Application Information

Students should complete and submit their online application with supporting documentation (if applicable) by the date indicated on the Physical Therapy M.P.T. program of study (https://umanitoba.ca/explore/programs-of-study/physical-therapy-mpt/) page.

Degree Requirements

Students in the M.P.T. program must complete 103 credit hours of coursework. All academic and clinical education courses and a

professional portfolio must be successfully completed in order to graduate.

Clinical Education Requirements

Clinical education is integrated throughout the M.P.T. program and typically follows major academic components to consolidate knowledge and skills learned in class. It consists of 4x 6 week and 1x 5 week clinical placements at a variety of sites. All students should be prepared to complete a clinical placement at a site outside of Winnipeg during the course of the program. Students must fulfil the health-related certifications, background checks and licensing requirements outlined below in order to participate in clinical placements. Additional information regarding these requirements is sent to new applicants following their acceptance into the program.

Health Requirements

Following their acceptance into the program, all new M.P.T. students will receive instructions regarding completion of the *Immunization Package* from the Rady Faculty of Health Sciences Immunization Program. Students are required to return their completed packages, including immunization records, by the date published in the packages. New and returning students must meet immunizations requirements as identified by the Rady Faculty of Health Sciences Immunization Program in order to participate in clinical placements.

Mask Fit Certification

Current *mask fit certification* is required for M.P.T. students to participate in clinical placements at many sites. There are a variety of masks in use at these clinical placement sites, so the program will make arrangements for mask fit testing of students after they have commenced the program and their clinical placement sites are known. Students are not to arrange their own mask fit testing prior to commencing the program as they may be tested on a mask that is not in use at their clinical placement sites.

Cardiopulmonary Resuscitation (CPR) Certification

M.P.T. students are required to obtain CPR certification annually. Certification must be through a Heart & Stroke Foundation certified course at the level of *Basic Life Support· BLS Provider* or higher (e.g. *Advanced Cardiac Life Support·ACLS*). Students must provide proof of certification by September 1 of every year while in the program, and the certification must have an issue date no earlier than August 1 of that year.

Criminal Record Check, Adult Abuse Registry Check and Child Abuse Registry Check

M.P.T. students are required to obtain and submit a *Criminal Record Check with vulnerable sector search* annually in order to participate in clinical placements. Students must submit the check by September 1 of every year while in the program, and the check must have an issue date no earlier than August 1 of that year. M.P.T. students are also required to obtain an *Adult Abuse Registry Check* and a *Child Abuse Registry Check* annually in order to participate in clinical placements. The program will apply for these two checks on behalf of students after they have commenced classes. (N.B.: Some clinical sites require the above three documents to be less than 6 months old at the start of the placement, so students may need to reorder the checks in the same academic year if they attend one of these sites.)

College of Physiotherapists of Manitoba (CPM) Registration

M.P.T. students must obtain student registration with CPM by September 15 of every year while in the program in order to participate in clinical placements. Students must submit their original Criminal Record Check with their application form and fee when registering with CPM.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
PT 6100	Foundations of Physical Therapy (C & WL)	5
PT 6110	Foundations to Evidenced-Based Practice 1	1
PT 6124	Physical Therapy and Hospital Based Care (C & WL)	4
PT 6130	Applied Sciences for Physical Therapy 1 (C & WL)	4
PT 6140	Neuromusculoskeletal Anatomy for Physical Therapy (C & WL)	3
PT 6221	Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 1 (C & WL)	6
PT 6224	Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 2 (C & WL)	6
PT 6230	Applied Sciences for Physical Therapy 2 (C & WL)	6
PT 6250	Integrated Practice for Neuromusculoskeletal Conditions	3
PT 6260	Physical Therapy Practice and Professional Issues 1	3
PT 6291	Neuromusculoskeletal Clinical Education 1	6
PT 6292	Neuromusculoskeletal Clinical Education 2	6
PT 6310	Foundations to Evidenced-Based Practice 2	2
	Hours	**55**
Year 2		
PT 7121	Clinical Skills for Physical Therapy Neurological Conditions (C & WL)	5
PT 7124	Clinical Skills for Physical Therapy in Cardiorespiratory Conditions	5
PT 7150	Integrated Practice for Cardiorespiratory and Neurological Conditions	3
PT 7160	Physical Therapy Practice and Professional Issues 2	3
PT 7230	Applied Sciences for Physical Therapy 3 (C & WL)	3
PT 7330	Applied Sciences for Physical Therapy 4 (C & WL)	3
PT 7294	Cardiovascular and Pulmonary Clinical Education	5
PT 7292	Neurosciences Clinical Education	6
PT 7390	Elective Clinical Education	6
PT 7410	Exercise Prescription and Manual Therapy for Physical Therapists	3

PT 7500	Physical Therapy Evaluation/Research Project	6
	Hours	**48**
	Total Hours	**103**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Course registration information for the incoming first year students will be forwarded to them by the Department/Program Assistant. Returning students will have course registration information sent to their U of M email account.

Not all courses will be offered each year. Please check the Aurora catalog to find out when a course is offered.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Rehabilitation Sciences, M.Sc.

Rehabilitation Sciences
Chair: Joanne Parsons
Campus Address/General Office: R106-771 McDermot Avenue
Telephone: 204-789-3897
Fax: 204-789-3927
Email Address: CORS.MSCRehab@umanitoba.ca
Website: umanitoba.ca/rehabilitation-sciences/ (https://umanitoba.ca/rehabilitation-sciences/)
Academic Staff: Please refer to the Rehabilitation Sciences website (https://umanitoba.ca/rehabilitation-sciences/research-and-scholarly-activity/#our-researchers) for current staff listing.

Rehabilitation Sciences Program Information

The College of Rehabilitation Sciences currently offers a Master of Science (Rehabilitation Sciences) degree program. The purpose of this program is to provide research training to individuals in the field of rehabilitation.

The College of Rehabilitation Sciences, along with the Faculty of Kinesiology and Recreation Management, offers a multi-faculty Ph.D. in Applied Health Sciences. (p. 236)

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Rehabilitation Sciences M.Sc. Admission Requirements

Admission requirements include a 4 year Baccalaureate degree or equivalent in Physical Therapy, Occupational Therapy, Respiratory Therapy, or a related discipline (e.g., kinesiology, biomedical engineering, exercise science).

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Rehabilitation Sciences M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/rehabilitation-sciences-msc/) page.

Degree Requirements

All students must include REHB 7280 Rehabilitation Theory and Research Design (3 credit hours) as part of the required 12 credit hours of coursework. The remaining 9 credit hours are to be chosen by the student through consultation with the advisor.

A reduction from the minimum of 12 credit hours to 6 credit hours (REHB 7280 plus 3 additional credit hours) may be permitted for students entering the program with an entry-to-practice degree at the Master's

level. In such cases, a specific program of study must be proposed by the primary advisor and approved by the Program Chair.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
REHB 7280	Rehabilitation Theory and Research Design	3
Courses chosen in consultation with the advisor		9
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**12**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Not all courses will be offered each year. Please check the Aurora catalog to find out when a course is offered.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Dr. Gerald Niznick College of Dentistry

Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Oral and Maxillofacial Surgery, M.Dent. (p. 310)	4	49	
Oral Biology, M.Sc. (p. 312)	2	12	
Oral Biology, Ph.D. (p. 313)	4	12	
Orthodontics and Dentofacial Orthopedics, M.Dent. (p. 314)	3	40	
Pediatric Dentistry, M.Dent. (p. 315)	3	64	
Periodontics, M.Dent. (p. 317)	3	58	
Prosthodontics, M.Dent. (p. 318)	3	99	

Oral and Maxillofacial Surgery, M.Dent.

Dental Diagnostic & Surgical Sciences
Head/Program Director: A. Shah

Campus Address/General Office: D343-780 Bannatyne
Telephone: 204-789-3684
Fax: 204-272-3077
Email Address: oral.surgery@umanitoba.ca (oral_surgery@umanitoba.ca)

Website: umanitoba.ca/dentistry/dental-diagnostic-and-surgical-sciences (https://umanitoba.ca/dentistry/dental-diagnostic-and-surgical-sciences/)

Oral and Maxillofacial Surgery Program Information

The Master of Dentistry (Oral and Maxillofacial Surgery) includes a four-year hospital residency for which a Post-Graduate Training Certificate is awarded. The program is certified and fully accredited by the Commission on Dental Accreditation of Canada and, as such, is also recognized by the American Dental Association. The primary objective of the program is to train dentists to become competent, ethical Oral and Maxillofacial surgeons for practice in Canada.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Oral and Maxillofacial Surgery M.Dent. Admission Requirements

Applicants must be Canadian citizens or permanent residents of Canada and be in possession of a National Dental Examining Board of Canada Certificate. They must comply with provincial requirements for licensing of interns and residents. Some additional post-graduate experience is desirable.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Oral and Maxillofacial Surgery M.Dent. program of study (https://umanitoba.ca/explore/programs-of-study/oral-and-maxillofacial-surgery-mdent/) page.

Degree Requirements

Students must complete:

- All clinical rotations and assignments as set out in the four years of hospital residency training;
- All courses listed under the "Progression Chart".
- An essay/research project DDSS 7220 in a specified area selected in consultation with the department is required.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 6000	Summer Research	0
GRAD 7020	Master's Re-registration	0
DDSS 7030	Advanced Oral Radiology (Bi-yearly course - may be taken in Year 2)	1
DDSS 7220	Essay/Research Project (Spanned course taken in Year 1, Year 2, Year 3 & Year 4)	0
DDSS 7230	Advanced Oral Pathology (Bi-yearly course – may be taken in Year 2)	6
DDSS 7240	Advanced Oral and Maxillofacial Surgery Seminar 1	3
DDSS 7250	Clinical Advanced Oral and Maxillofacial Surgery 1	6
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy (Bi-yearly course – may be taken in Year 2)	6
CHSC 6810	Biostatistics for Clinicians	3
ORLB 7090	Pharmacology and Therapeutics (Bi-yearly course – may be taken in Year 2)	3
	Hours	**28**
Year 2		
DDSS 7260	Advanced Oral and Maxillofacial Surgery Seminar 2	3
DDSS 7270	Clinical Advanced Oral and Maxillofacial Surgery 2	6
	Hours	**9**
Year 3		
DDSS 7280	Clinical Advanced Oral and Maxillofacial Surgery 3	6
	Hours	**6**
Year 4		
DDSS 7290	Clinical Advanced Oral and Maxillofacial Surgery 4	6
Thesis Defense [1]		
	Hours	**6**
	Total Hours	**49**

[1] The oral defense is open to all and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Oral Biology, M.Sc.

Head: Dr. James Gilchrist
Campus Address/General Office: P129B - 770 Bannatyne Avenue
Telephone: 204-789-3571 (Graduate Program Assistant)
Fax: 204-789-3912
Email Address: oral.biology@umanitoba.ca (oral_biology@umanitoba.ca)
Website: umanitoba.ca/dentistry/oral-biology (https://umanitoba.ca/dentistry/oral-biology/)
Academic Staff: Please refer to the Oral Biology website (https://umanitoba.ca/dentistry/faculty-staff/#oral-biology) for Academic staff information.

Oral Biology Program Information

The Department of Oral Biology offers graduate instruction and research leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Oral Biology M.Sc. Admission Requirements

Students should possess an appropriate professional degree or B.Sc. degree with a satisfactory background in biological sciences.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Oral Biology M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/oral-biology-msc/) page.

Degree Requirements

The M.Sc. program requires satisfactory completion of course requirements as specified by each student's advisory committee and a thesis based on original research. Minimum course requirements are 12 credit hours **which must include** course ORLB 7190 (unless students have previous credit for this or an equivalent course).

M.Sc. students are expected to attend all departmental seminars. Students shall present one seminar on their research to the department each year, updating it each year.

In addition, students must pass an oral examination on the subject of the thesis and matters relating thereto.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
ORLB 7190	Communication Skills in Dental Research [1]	3
Courses at the 7000 level [2]		9
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
	Hours	**0**
	Total Hours	**12**

1 ORLB 7190 is required for all Oral Biology Master's students, but may not be offered every year. It may be taken in year 2 of the program.

2 All other courses are chosen through discussion between student and advisor

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new or returning graduate students must have identified a faculty member willing to act as thesis advisor. This must be done through personal interviews prior to registration. All programs of study must be approved by the department head or chair of the Graduate Studies and Research Committee.

Not all departmental graduate level courses are offered each year. Consult with appropriate faculty members.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Oral Biology, Ph.D.

Head: Dr. James Gilchrist
Campus Address/General Office: P129B - 770 Bannatyne Avenue
Telephone: 204-789-3571 (Graduate Program Assistant)
Fax: 204-789-3912
Email Address: oral.biology@umanitoba.ca (oral_biology@umanitoba.ca)
Website: umanitoba.ca/dentistry/oral-biology (https://umanitoba.ca/dentistry/oral-biology/)
Academic Staff: Please refer to the Oral Biology website (https://umanitoba.ca/dentistry/faculty-staff/#oral-biology) for Academic staff information.

Oral Biology Information

The Department of Oral Biology offers graduate instruction and research leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Oral Biology Ph.D. Admission Requirements

A M.Sc. degree is required, although students of exceptional or proven ability holding an appropriate professional degree or a B.Sc. (Hons.) degree may be admitted.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Oral Biology Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/oral-biology-phd/) page.

Degree Requirements

The Ph.D. program requires satisfactory completion of course requirements as determined by each student's advisory committee and a thesis based on original research. Minimum course requirements shall be 12 credit hours at the 7000 level beyond the Master's degree, **and must include** course ORLB 7190 (unless students have previous credit for this or an equivalent course). **Courses taken during the Master's programs cannot be transferred as credits towards the Ph.D. program.**

Ph.D. students are expected to attend all departmental seminars. Students shall present at least one seminar on their own research to the department each year.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
ORLB 7190	Communication Skills in Dental Research [1]	3
Courses at the 7000 level [2]		9
	Hours	**12**
Years 2-4		
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
GRAD 8010	Doctoral Candidacy Examination [3]	0
	Hours	**0**
	Total Hours	**12**

1 Unless student has previous credit for this or an equivalent course. ORLB 7190 may not be offered every year, course may be taken in year 2.

2 All other courses are chosen through discussion between student and advisor.

[3] Doctorial Candidacy Exam cannot be taken until all PhD program coursework is completed, and should be completed no later than 1 year prior to expected graduation.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new or returning graduate students must have identified a faculty member willing to act as thesis advisor. This must be done through personal interviews prior to registration. All programs of study must be approved by the department head or chair of the Graduate Studies and Research Committee.

Not all departmental graduate level courses are offered each year. Consult with appropriate faculty members.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Orthodontics and Dentofacial Orthopedics, M.Dent.

Preventive Dental Science
Head/Program Director: Dr. William Wiltshire
Campus Address/General Office: P129B-770 Bannatyne Avenue
Telephone: 204-789-3571 (Graduate Program Assistant)
Fax: 204-789-3912
Email Address: orthodontics@umanitoba.ca
Website: umanitoba.ca/dentistry/preventive-dental-science (https://umanitoba.ca/dentistry/preventive-dental-science/)
Academic Staff: Please refer to the Preventive Dental Science (https://umanitoba.ca/dentistry/faculty-staff/#preventive-dental-science) website for Academic staff information.

Preventive Dental Science Information

The department of Preventive Dental Science offers programs leading to the Master of Dentistry (Orthodontics and Dentofacial Orthopedics) and Master of Dentistry (Pediatric Dentistry) degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Orthodontics and Dentofacial Orthopedics M.Dent. Admission Requirements

Applicants must be a graduate of a full-time minimum four-year University-based dentistry program and have at least one year of clinical experience.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Orthodontics and Dentofacial Orthopedics M.Dent. program of study (https://umanitoba.ca/explore/programs-of-study/orthodontics-dentofacial-orthopedics-mdent/) page.

Degree Requirements

Students must successfully complete:

- All courses listed under the "Progression Chart"
- A thesis based on original research and acceptable to the Faculty of Graduate Studies and successful oral defence is also required, as well as submission of a peer-reviewed paper suitable for publication to the satisfaction of the Program Director.

Expected Time to Graduate: 3 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 6000	Summer Research	0
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy	6
CHSC 6810	Biostatistics for Clinicians	3
	Hours	**9**
Years 1-3		
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
PDSD 7000	Neural Basis of Oropharyngeal Function (Bi-yearly course – may be taken in Year 2)	3
PDSD 7020	The Mechanics of Orthodontic Therapy (Bi-yearly course – may be taken in Year 2)	6
PDSD 7040	Clinical Craniofacial Growth and Development (Spanned course taken in Year 1, Year 2, and Year 3)	3
PDSD 7060	Cephalometric Analysis (Bi-yearly course – may be taken in Year 2)	3
PDSD 7070	Biology of Orthodontics and Facial Orthopedics (Bi-yearly course – may be taken in Year 2)	3
DDSS 7030	Advanced Oral Radiology (Bi-yearly course – may be taken in Year 2)	1
DDSS 7130	Occlusion (Bi-yearly course – may be taken in Year 2)	3
DDSS 7230	Advanced Oral Pathology (Bi-yearly course – may be taken in Year 2)	6
RSTD 7150	Orthodontic Materials (Bi-yearly course – may be taken in Year 2)	3
	Hours	**31**
Year 3		
Thesis Defense [1]		
	Hours	**0**
	Total Hours	**40**

[1] The oral defence is open to all and the student has 20 to 25 minutes for a presentation, Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Pediatric Dentistry, M.Dent.

Preventive Dental Science
Head: W. Wiltshire
Acting Program Director: K. Gamboa
Campus Address/General Office: P131-790 Bannatyne Avenue
Telephone: 204-789-3401
Fax: 204-789-3912
Email Address: pediatric@umanitoba.ca
Website: umanitoba.ca/dentistry/preventive-dental-science (https://umanitoba.ca/dentistry/preventive-dental-science/)
Academic Staff: Please refer to the Preventive Dental Science (https://umanitoba.ca/dentistry/faculty-staff/#preventive-dental-science) website for Academic staff information.

Preventive Dental Science Information

The department of Preventive Dental Science offers programs leading to the Master of Dentistry (Orthodontics and Dentofacial Orthopedics) and Master of Dentistry (Pediatric Dentistry) degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Pediatric Dentistry M.Dent. Admission Requirements

Applicants must be Canadian Citizens / Permanent Residents of Canada, a graduate of a full-time minimum four-year University-based dentistry program and have at least one year of clinical experience.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pediatric Dentistry M.Dent. program of study (https://umanitoba.ca/explore/programs-of-study/pediatric-dentistry-mdent/) page.

Degree Requirements

- All courses listed under the "Progression Chart".
- A thesis based on original research and acceptable to the Faculty of Graduate Studies and successful oral defence is also required.

Expected Time to Graduate: 3 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 6000	Summer Research	0
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy	6
CHSC 6810	Biostatistics for Clinicians	3
	Hours	**9**
Years 1-3		
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
PDSD 7101	Preventive Programs in Pediatric Dentistry	3
PDSD 7102	Hospital Pediatric Dentistry I	6
PDSD 7103	Hospital Pediatric Dentistry II	6
PDSD 7104	Management and Restorative Treatment of Pediatric Patients I	6
PDSD 7105	Management and Restorative Treatment of Pediatric Patients II	6
PDSD 7106	Preventive and Community Pediatric Dentistry	3
PDSD 7107	Special Needs and Emergency Care in Pediatric Patients	3
PDSD 7108	Growth and Development - Management of the Developing Occlusion	3
PDSD 7110	Pharmacology and Toxicology in Pediatric Dentistry	3
DDSS 7030	Advanced Oral Radiology (Bi-yearly course - may be taken in Year 2)	1
DDSS 7230	Advanced Oral Pathology (Bi-yearly course - may be taken in Year 2)	6
INDG 1220	Indigenous Peoples in Canada, Part 1	3
INDG 1240	Indigenous Peoples in Canada, Part 2	3
INDG 3240	Indigenous Medicine and Health	3
	Hours	**55**
Year 3		
Thesis Defense [1]		
	Hours	**0**
	Total Hours	**64**

[1] The oral defense is open to all and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Periodontics, M.Dent.

Dental Diagnostic & Surgical Sciences
Head: A. Shah
Program Director: C. Stavropoulou (Acting)
Campus Address/General Office: D343 - 780 Bannatyne Avenue
Telephone: 204-789-3684
Fax: 204-272-3077
Email Address: periodontics@umanitoba.ca
Website: umanitoba.ca/dentistry/dental-diagnostic-and-surgical-sciences (https://umanitoba.ca/dentistry/dental-diagnostic-and-surgical-sciences/)

Periodontics Program Information

The three-year Master of Dentistry (Periodontics) program entails clinical training, lectures, seminars in the clinical and related basic sciences and research. The program is certified and fully accredited by the Commission on Dental Accreditation of Canada and, as such, is also recognized by the American Dental Association.

The program provides periodontal consultation and treatment services, including dental implants, to patients attending the Faculty of Dentistry and patients referred by private practice dentists in Winnipeg and throughout Manitoba. Residents are provided the opportunity to treat a full range of periodontal problems and to participate in on-going clinical and basic periodontal research. The Graduate Periodontal Clinic simulates a private periodontal practice and provides dental hygienist and dental assistant support to residents. A conscious sedation hospital rotation as well as private practice periodontal office rotations are part of the curriculum as well.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Periodontics M.Dent. Admission Requirements

Applicants must have a D.M.D. degree or its equivalent from an approved college or university.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Periodontics M.Dent. program of study (https://umanitoba.ca/explore/programs-of-study/periodontics-mdent/) page.

Degree Requirements

Students must complete:

- All courses listed under the "Progression Chart".
- An Essay/Research project (DDSS 7220) in a specified area selected in consultation with the department.

Expected Time to Graduate: 3 years

Progression Chart

Course	Title	Hours
Years 1-3		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial (must be taken in first term)	0
GRAD 6000	Summer Research	0
GRAD 7020	Master's Re-registration	0
DDSS 7010	Biology and Pathology of the Periodontium (Bi-yearly course – may be taken in Year 2)	6
DDSS 7030	Advanced Oral Radiology (Bi-yearly course – may be taken in Year 2)	1
DDSS 7050	Oral Medicine and Oral Diagnosis (Spanned course taken in Year 1, Year 2 & Year 3)	3
DDSS 7120	Advanced Clinical Periodontics (Spanned course taken in Year 1, Year 2 & Year 3)	4
DDSS 7130	Occlusion (Bi-yearly course – may be taken in Year 2)	3
DDSS 7160	Basic Clinical Periodontics	2
DDSS 7210	Clinical Practice in Periodontics (Spanned course taken in Year 1, Year 2 & Year 3)	18
DDSS 7220	Essay/Research Project (Spanned course taken in Year 1, Year 2 & Year 3)	0
DDSS 7230	Advanced Oral Pathology (Bi-yearly course – may be taken in Year 2)	6
DDSS 7300	Dental Implantology (Bi-yearly course – may be taken in Year 2)	3
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy (Bi-yearly course – may be taken in Year 2)	6
CHSC 6810	Biostatistics for Clinicians	3
ORLB 7090	Pharmacology and Therapeutics (Bi-yearly course – may be taken in Year 2)	3
	Hours	**58**
Year 3		
Research Presentation/Oral Examination [1]		
	Hours	**0**
	Total Hours	**58**

[1] The research presentation/oral examination is open to all, and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Prosthodontics, M.Dent.

Restorative Dentistry
Head: Vanessa Swain
Program Director: Igor Pesun
Campus Address/General Office: P129B - 770 Bannatyne Avenue
Telephone: 204-789-3516 (Graduate Program Assistant)
Fax: 204-789-3912
Email Address: prostho@umanitoba.ca
Website: umanitoba.ca/dentistry/restorative-dentistry (https://umanitoba.ca/dentistry/restorative-dentistry/)

Restorative Dentistry Information

The department of Restorative Dentistry offers a program leading to the Master of Dentistry (Prosthodontics) degree.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Prosthodontics M.Dent. Admission Requirements

A D.M.D. or D.D.S. from a minimum four-year undergraduate Dental School is required. A D.M.D. or D.D.S. that is only three years in length is acceptable if the undergraduate dental school is accredited in Canada.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Prosthodontics M.Dent. program of study (https://umanitoba.ca/explore/programs-of-study/prosthodontics-mdent/) page.

Degree Requirements

The M.Dent. program is comprised of didactic, laboratory, and clinical course requirements, and a research thesis. The minimum number of credit hours required in the program is 99 hours.

Expected Time to Graduate: 3 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
RSTD 7010	Dental Laboratory Technology	4
RSTD 7016	Clinical Practice in Prosthodontics 1	8
RSTD 7116	Clinical Practice in Prosthodontics 2	8
CHSC 6810	Biostatistics for Clinicians	3
ANAT 7060	Advanced Human Macroscopic (Gross) Anatomy	6
	Hours	**29**
Years 1-2		
Courses offered bi-yearly taken in Year 1 or Year 2		
DDSS 7030	Advanced Oral Radiology	1
DDSS 7130	Occlusion	3
DDSS 7230	Advanced Oral Pathology	6
DDSS 7300	Dental Implantology	3
ORLB 7090	Pharmacology and Therapeutics	3
RSTD 7100	Dental Materials	6
RSTD 7014	Classic Fixed Prosthodontic Literature Review	1
RSTD 7114	Classic Removable Partial Denture Prosthodontic Literature Review	1
RSTD 7024	Classic Complete Denture Prosthodontic Literature Review	1

RSTD 7124	Classic Articulator and Maxillofacial Literature Review	1
	Hours	**26**
Years 1-3		
Courses offered once every 3 years taken in Year 1 or Year 2 or Year 3		
RSTD 7012	Advanced Prosthodontic Seminars 1-TMD, Occlusion, Articulators	1
RSTD 7112	Advanced Prosthodontic Seminar 2 - Complete Dentures, Maxillofacial Prosthodontics	1
RSTD 7022	Advanced Prosthodontic Seminars 3 - Removable Partial Dentures, Dental Materials	1
RSTD 7122	Advanced Prosthodontic Seminars 4 - Conventional Fixed Prosthodontics	1
RSTD 7032	Advanced Prosthodontic Seminars 5 - Implant Prosthodontics	1
RSTD 7132	Advanced Prosthodontic Seminars 6- Practice Management, Ethics, and Sleep Medicine	1
RSTD 7018	Current Prosthodontic Literature Review 1	1
RSTD 7118	Current Prosthodontic Literature Review 2	1
RSTD 7028	Current Prosthodontic Literature Review 3	1
RSTD 7128	Current Prosthodontic Literature Review 4	1
RSTD 7038	Current Prosthodontic Literature Review 5	1
RSTD 7138	Current Prosthodontic Literature Review 6	1
	Hours	**12**
Year 2		
RSTD 7026	Clinical Practice in Prosthodontics 3	8
RSTD 7126	Clinical Practice in Prosthodontics 4	8
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
	Hours	**16**
Year 3		
RSTD 7036	Clinical Practice in Prosthodontics 5	8
RSTD 7136	Clinical Practice in Prosthodontics 6	8
GRAD 7000	Master's Thesis	0
GRAD 7020	Master's Re-registration	0
Thesis Defense [1]		
	Hours	**16**
	Total Hours	**99**

[1] The oral defense is open to all and the student has 20 to 25 minutes for a presentation. Typically, 5 minutes is permitted per examiner in a first round of questions, then a second round with an opportunity for follow-up questions from each examiner. Questions may be permitted from the audience should time permit. The entire oral examination should not exceed 1 hour, following which the committee will deliberate on whether the candidate passes, passes subject to revision of the thesis or fails.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Max Rady College of Medicine Programs

Degree/Diploma	Years to Completion	Total Credit Hours	Has Co-op Option
Biochemistry and Medical Genetics, M.Sc. (p. 320)	2	11	
Biochemistry and Medical Genetics, Ph.D. (p. 322)	4	11	
Community Health Sciences, M.P.H. (p. 323)	2	30	
Community Health Sciences, M.Sc. (p. 325)	2-4	21	
Community Health Sciences, Ph.D. (p. 327)	4-6	18-24	
Genetic Counselling, M.Sc. (p. 329)	2	30	
Human Anatomy and Cell Science, M.Sc. (p. 330)	2-3	9	
Human Anatomy and Cell Science, Ph.D. (p. 332)	4-5	6	
Immunology, M.Sc. (p. 333)	2-3	9	
Immunology, Ph.D. (p. 334)	4-5	9,15,18	
Medical Microbiology & Infectious Diseases, M.Sc. (p. 336)	2-3	12	
Medical Microbiology and Infectious Diseases, Ph.D. (p. 338)	5-6	6-12	
Micro-Diploma in Science Communication (p. 339)		6	
Pathology, M.Sc. (p. 342)	2-4	9-33.5	
Pathology and Laboratory Medicine, Ph.D. (p. 340)	4	12	
Pediatrics and Child Health, M.Sc. (p. 343)	2	12	
Pediatrics and Child Health, Ph.D. (p. 345)	4	15	
Pharmacology and Therapeutics, M.Sc. (p. 346)	2-3	9-12	
Pharmacology and Therapeutics, Ph.D. (p. 347)	3-5	6-12	
Physician Assistant Studies, M.P.A.S. (p. 349)	2-3	86	
Physiology & Pathophysiology, M.Sc. (p. 350)	2	9	
Physiology & Pathophysiology, Ph.D. (p. 351)	4	9	
Surgery, M.Sc. (p. 352)	2	12	

Biochemistry and Medical Genetics, M.Sc.

Biochemistry and Medical Genetics
Head: Dr. B. Triggs-Raine
Associate Head: Dr. S. Gibson
Grad Chair: Dr. J. Wigle
Campus Address/General Office: 336 - 745 Bannatyne Avenue
Telephone: 204-789-3593
Fax: 204-789-3900
Email Address: bmgadmin@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-biochemistry-and-medical-genetics (https://umanitoba.ca/medicine/medicine/department-biochemistry-and-medical-genetics/)
Academic Staff: Please refer to the Biochemistry website (https://umanitoba.ca/medicine/biochemistry-and-medical-genetics/faculty-staff/) for Faculty information.

Biochemistry and Medical Genetics Program Information

The department offers programs leading to the Masters of Science and the Doctor of Philosophy degrees. There are a wide range of potential thesis projects broadly related to one of the following areas of

research: cancer, computational biology, epigenetics, genetic basis of development and disease, and regenerative medicine.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Biochemistry and Medical Genetics M.Sc. Admission Requirements

Applicants must have an advanced (four year) degree with an appropriate background in biochemistry, genetics, or a closely related subject area; and, a minimum 3.5 GPA (based on a 4.5 scale), or equivalent, in the previous 60 credit hours of university study, or equivalent (normally 2 years). In addition, during this period there should be no grade less than C + in any biochemistry, genetics, or life science course deemed relevant to the proposed course of study.

Admission will depend upon the availability of a Faculty Member to supervise the student and resources to support the student's research.

In rare cases, applicants with GPA's lower than 3.5 or with a grade below C+ in the previous 60 credit hours may be admitted to this department, based upon individual circumstances and the support of their prospective advisors. Students in this situation should consult with their prospective advisor and the Chair of the Graduate Student Admissions and Awards Committee.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biochemistry and Medical Genetics M.Sc. program of study (https://umanitoba.ca/explore/biochemistry-and-medical-genetics-msc/) page.

Degree Requirements

Students must complete a minimum of 9 credit hours of coursework in addition to BGEN 7000 Research Seminar for Master's Students.

A written thesis is required for the research-based Master's degree.

Expected Time to Graduate: 2-3 years

Progression Chart

Master of Science (Biochemistry and Medical Genetics)

Research focus in Biochemistry and Medical Genetics

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BGEN 7000	Research Seminar M.Sc. [1]	1
IMED 7120	Medical Biochemistry [2]	3
IMED 7170	Medical Genetics [2]	3
Select additional course(s) to be chosen by the student and his/her advisor and/or advisory committee		3
	Hours	**10**
Year 2		
GRAD 7000	Master's Thesis	0
BGEN 7000	Research Seminar M.Sc. [1]	1
	Hours	**1**
	Total Hours	**11**

1 Students must enroll in BGEN 7000 every Fall and Winter term of program enrollment.

2 If, after consultation with the student's advisory committee, the course coordinator, and the Graduate Student Affairs Committee, it is deemed that a student already holds a course equivalent to IMED 7120 or IMED 7170, then alternative coursework will be selected as agreed by the student's advisor or advisory committee.

Master of Science (Biochemistry and Medical Genetics)

Research focus in Computational Biology

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BGEN 7000	Research Seminar M.Sc. [1]	1
IMED 7120 or IMED 7170	Medical Biochemistry [2] or Medical Genetics	3
IMED 7280	Medical Computational Biology	3
Select additional course(s) to be chosen by the student and his/her advisor and/or advisory committee		3
	Hours	**10**
Year 2		
GRAD 7000	Master's Thesis	0
BGEN 7000	Research Seminar M.Sc. [1]	1
	Hours	**1**
	Total Hours	**11**

1 Students must enroll in BGEN 7000 every Fall and Winter term of program enrollment.

2 If, after consultation with the student's advisory committee, the course coordinator, and the Graduate Student Affairs Committee, it is deemed that a student already holds a course equivalent to IMED 7120 or IMED 7170, then alternative coursework will be selected as agreed by the student's advisor or advisory committee.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the department of Biochemistry and Medical Genetics are required to complete a Course Approval Form in consultation with their supervisor **prior** to registering for courses and making program changes. The Course Approval Form must be signed by the student, supervisor, graduate chair or the department head and submitted to the graduate program coordinator. Only courses that are included on the Course Approval Form will be credited to the student's program. All course additions and withdrawals (registration

revision) must be approved in the same manner by completing or filling out the Registration Revision Form available on the website.

Consult the department office or browse the web for a list of course offerings.

It should be noted that not all courses are offered every year and some courses will be held only with a minimum enrolment. Please check the Aurora catalog to find out when a course is offered.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Biochemistry and Medical Genetics, Ph.D.

Biochemistry and Medical Genetics
Head: Dr. B. Triggs-Raine
Associate Head: Dr. S. Gibson
Grad Chair: Dr. J. Wigle
Campus Address/General Office: 336 - 745 Bannatyne Avenue, Winnipeg, MB, R3E 0J9
Telephone: 204-789-3593
Fax: 204-789-3900
Email Address: bmgadmin@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-biochemistry-and-medical-genetics (https://umanitoba.ca/medicine/medicine/department-biochemistry-and-medical-genetics/)
Academic Staff: Please refer to the Biochemistry website (https://umanitoba.ca/medicine/biochemistry-and-medical-genetics/faculty-staff/) for Faculty information.

Biochemistry and Medical Genetics Program Information

The department offers programs leading to the Masters of Science and the Doctor of Philosophy degrees. There are a wide range of potential thesis projects broadly related to one of the following areas of research: cancer, computational biology, epigenetics, genetic basis of development and disease, and regenerative medicine.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Biochemistry and Medical Genetics Ph.D. Admission Requirements

A thesis-based Master's degree (of at least 2 years in duration), or equivalent, in biochemistry, genetics, or a closely related field, from a Canadian university is required for direct admission to the Ph.D. program. In addition, a cumulative GPA of 3.5 (4.5 scale), or equivalent, and no grade less than C+ in the courses taken during the Master's program is required.

Generally, there is no direct entry into the Ph.D. program for students with Master's degrees from non-Canadian universities. Admission will also depend upon the availability and willingness of a Faculty Member to supervise the student and resources to support the student's research.

TRANSFER TO A PH.D. PROGRAM

Students registered for a Master's degree who have made excellent progress over the first year in their program may be considered for transfer to the Ph.D. program. The transfer process, as outlined in the supplemental regulations, must be completed within 16 months of the student's commencement in the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Biochemistry and Medical Genetics Ph.D. program of study (https://umanitoba.ca/explore/biochemistry-and-medical-genetics-phd/) page.

Degree Requirements

Students who transition from the M.Sc. program are required to take 6 credit hours (in addition to the 10 credit hours required in fulfillment of the MSc program). Students holding a thesis-based M.Sc. degree who enter directly into the Ph.D. program must take a minimum of 9 credit hours.

A written thesis is required for the Doctoral degree.

Expected Time to Graduate: 4–5 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BGEN 8000	Research Seminar Ph.D. [1]	1
Select two of the following:		6
IMED 7120	Medical Biochemistry [2]	
IMED 7170	Medical Genetics [2]	
IMED 7280	Medical Computational Biology [2]	
Additional course(s) to be chosen by the student and his/her advisor and/or advisory committee		3
	Hours	**10**
Years 2-4		
GRAD 8000	Doctoral Thesis	0
BGEN 8000	Research Seminar Ph.D. [1]	1
	Hours	**1**
	Total Hours	**11**

1 Students must enroll in BGEN 8000 every Fall and Winter term of program enrollment.

2 If, after consultation with the student's advisory committee, the course coordinator, and the Graduate Student Affairs Committee, it is deemed that a student has already completed or holds a course equivalent to IMED 7120, IMED 7170 or IMED 7280 then alternative coursework will be selected as agreed by the student's advisor or advisory committee.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the department of Biochemistry and Medical Genetics are required to complete a Course Approval Form in consultation with their supervisor **prior** to registering for courses and making program changes. The Course Approval Form must be signed by the student, supervisor, graduate chair or the department head and submitted to the graduate program coordinator. Only courses that are included on the Course Approval Form will be credited to the student's program. All course additions and withdrawals (registration revision) must be approved in the same manner by completing or filling out the Registration Revision Form available on the website.

Consult the department office or browse the web for a list of course offerings.

It should be noted that not all courses are offered every year and some courses will be held only with a minimum enrolment. Please check the Aurora catalog to find out when a course is offered.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Community Health Sciences, M.P.H.

Community Health Sciences
Head: Sharon Bruce
Grad Chair: C. Kelly
Campus Address/General Office: S111, Medical Services Building, 750 Bannatyne Avenue
Telephone: 204-789-3655
Fax: 204-789-3905
Email Address: chsinfo@umanitoba.ca
Website: umanitoba.ca/medicine/department-community-health-sciences (https://umanitoba.ca/medicine/department-community-health-sciences/)
Academic Staff: Please refer to the Community Health Sciences website (https://umanitoba.ca/medicine/department-community-health-sciences/#faculty-and-staff) for Faculty information.

Community Health Sciences Program Information

CHS offers broad, multidisciplinary graduate training at the Master and Doctoral levels in the concepts and methods of the population-based health sciences and their application in the practice of public health and preventive medicine.

The Doctoral program is designed to produce individuals who will teach in the community health sciences, train other researchers, design and execute major research projects, and serve as senior advisors and consultants in the area of health care policy and planning.

In contrast, our two Master's programs, the Master of Science and Master of Public Health degrees, are intended to satisfy the demand of local, regional, provincial and federal health departments for trained community health professionals. The M.Sc. program has a research focus requiring completion of a thesis while the M.P.H. program has a field-placement integrating applied public health concepts.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Community Health Sciences M.P.H. Admission Requirements

The M.P.H. program is open to individuals with four-year degrees in the health sciences or allied health professions or with honours degrees in the biological or social sciences, and a minimum of three years experience working in a field of health.

Please note that Community Health Sciences requires English Language Proficiency test scores (https://umanitoba.ca/explore/programs-of-study/community-health-sciences-mph/#admission-requirements) above the FGS minimum requirement.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Community Health Sciences M.P.H. program of study (https://umanitoba.ca/explore/programs-of-study/community-health-sciences-mph/) page.

Degree Requirements

The M.P.H. program consists of 30 credit hours from 7000-level core and elective courses. Following course work completion the student may select one of two routes as part of this program of study, by completing either a zero component supervised field placement or capstone research project. The majority of students will only be eligible for the field placement. Students with extensive prior public health experience may be eligible for the capstone research project.

Expected Time to Graduate: 2 years full-time, 4 years part-time

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CHSC 7500	Conc. Public Health	3
CHSC 7502	Core Concepts in Public Health 2	3
CHSC 7520	Principles of Epidemiology	3
CHSC 7530	Applied Public Health Epidemiology	3
CHSC 7632	Evaluation of Family, Health and Social Development Programs	3
CHSC 7820 or CHSC 7810	Biostatistics for Community Health Sciences [1] or Biostatistics for the Health and Human Sciences	3
CHSC 7XXX	One Approved Elective Course designated as 7000 level offered by Community Health Sciences [2]	3
	Hours	**21**
Year 2		
CHSC 7XXX	Three Approved Elective Courses designated as 7000 level offered by Community Health Sciences [2]	9
CHSC 7580 or CHSC 7590	Public Health Field Placement or Capstone Research Project in Public Health	0
	Hours	**9**
	Total Hours	**30**

1 Since an undergraduate level course in Statistics is a prerequisite for CHSC 7820, all students must have completed such a course at time of admission, or additional statistical training will be required.

2 On the recommendation of the student's advisor and with the approval of the Director of the Community Health Sciences Graduate Program elective courses for the Master of Public Health program may be taken in other departments.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Part of the process prior to registration may include obtaining permission from the relevant course instructor (see course catalog or CHS website course offerings for courses needing instructor permission). All course additions and withdrawals must have prior advisor approval. Students should register themselves via Aurora Student on the University of Manitoba website. If students encounter difficulties with registration they may contact the Community Health Sciences Graduate Program office for assistance.

It should be noted that not all courses are offered each year and some courses will be held with a minimum enrolment. Please check Aurora class schedule for a list of current course offerings.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Community Health Sciences, M.Sc.

Community Health Sciences
Head: Sharon Bruce
Grad Chair: C. Kelly
Campus Address/General Office: S111, Medical Services Building, 750 Bannatyne Avenue
Telephone: 204-789-3655
Fax: 204-789-3905
Email Address: chsinfo@umanitoba.ca
Website: umanitoba.ca/medicine/department-community-health-sciences (https://umanitoba.ca/medicine/department-community-health-sciences/)
Academic Staff: Please refer to the Community Health Sciences website (https://umanitoba.ca/medicine/department-community-health-sciences/#faculty-and-staff) for Faculty information.

Community Health Sciences Program Information

CHS offers broad, multidisciplinary graduate training at the Master and Doctoral levels in the concepts and methods of the population-based health sciences and their application in the practice of public health and preventive medicine.

The Doctoral program is designed to produce individuals who will teach in the community health sciences, train other researchers, design and execute major research projects, and serve as senior advisors and consultants in the area of health care policy and planning.

In contrast, our two Master's programs, the Master of Science and Master of Public Health degrees, are intended to satisfy the demand of local, regional, provincial and federal health departments for trained community health professionals. The M.Sc. program has a research focus requiring completion of a thesis while the M.P.H. program has a field-placement integrating applied public health concepts.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Community Health Sciences M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies (FGS).

Please note that Community Health Sciences requires English Language Proficiency test scores (https://umanitoba.ca/explore/programs-of-study/community-health-sciences-msc/#admission-requirements) above the FGS minimum requirement.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Community Health Sciences M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/community-health-sciences-msc/) page.

Degree Requirements

Twenty-one credit hours of course work from 7000-level courses: nine credit hours from required courses, three credit hours from methods and nine credit hours from electives and a thesis.

Students in the biostatistics concentration must complete nine credit hours of core courses, six credit hours of methods courses, six credit hours of electives, and a thesis.

Expected Time to Graduate: 2 years full-time, 4 years part-time

Progression Chart

Master of Science (Community Health Sciences)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0

GRAD 7500	Academic Integrity Tutorial	0
CHSC 7320	Organization and Financing of the Canadian Health Care System	3
CHSC 7520	Principles of Epidemiology	3
CHSC 7860	Methods and Concepts for Community Health Sciences	3
Select one of the following:		3
CHSC 7820	Biostatistics for Community Health Sciences [1]	
CHSC 7810	Biostatistics for the Health and Human Sciences	
CHSC 7738	Qualitative Research Methods in Community Health Sciences	
CHSC 7XXX	Three Approved Elective Courses designated as 7000 level offered by Community Health Sciences [2]	9
Proposal Work / Proposal Defense [3]		
	Hours	**21**
Year 2		
GRAD 7000	Master's Thesis [4]	0
	Hours	**0**
	Total Hours	**21**

1. Since an undergraduate level course in Statistics is a pre-requisite for CHSC 7820, all students must have completed such a course at time of admission, or will be required to take additional statistical training if they intend to complete CHSC 7820.
2. On the recommendation of the student's advisor and with approval of the Director of the CHSC Graduate Program elective courses for the M.Sc. program may be taken in other departments.
3. Students may work on their thesis proposal while taking courses, however, the proposal defense can be held after CHSC 7520, CHSC 7860 and CHSC 7820 or CHSC 7810 or CHSC 7738 courses have successfully been completed.
4. Proposal work / proposal defense continuation (if not completed within year 1), Research and write-up; Thesis Defense.

Master of Science Concentration in Biostatistics (Community Health Sciences)

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CHSC 7320	Organization and Financing of the Canadian Health Care System	3
CHSC 7520	Principles of Epidemiology	3
CHSC 7860	Methods and Concepts for Community Health Sciences	3
CHSC 7830	Advanced Biostatistics for Community Health Sciences	3
STAT 7080	Advanced Statistical Inference	3
CHSC/STAT 7XXX	Two Approved Elective Courses designated as 7000 level offered by Community Health Sciences and/or Statistics [1]	6
Proposal Work / Proposal Defense [2]		
	Hours	**21**
Year 2		
GRAD 7000	Master's Thesis	0
Proposal Work Continuation / Proposal Defense (if not completed within Year 1), Research; Thesis Defense		
	Hours	**0**
	Total Hours	**21**

1. Normally, a student should take three credit hours from each department, but this will be determined by the student in consultation with his/her advisor.
2. Students may work on their thesis proposal while taking courses. However, in the Biostatistics concentration, the propsal defense can only be held after CHSC 7520, CHSC 7860, and CHSC 7830 courses have successfully been completed.

Note:

CHSC 7820, an additional core requirement for the MSc program will normally be waived for students accepted to the Biostatistics concentration, with appropriate documentation.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Part of the process prior to registration may include obtaining permission from the relevant course instructor (see course catalog for courses needing instructor permission). All course additions and withdrawals must have prior advisor approval. Students should register themselves via Aurora Student on the University of Manitoba website. If students encounter difficulties with registration they may contact the Community Health Sciences Graduate Program office for assistance.

It should be noted that not all courses are offered each year and some courses will be held with a minimum enrolment. Please check Aurora class schedule for a list of current course offerings.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Community Health Sciences, Ph.D.

Community Health Sciences
Head: Sharon Bruce
Grad Chair: C. Kelly
Campus Address/General Office: S111, Medical Services Building, 750 Bannatyne Avenue
Telephone: 204-789-3655
Fax: 204-789-3905
Email Address: chsinfo@umanitoba.ca
Website: umanitoba.ca/medicine/department-community-health-sciences (https://umanitoba.ca/medicine/department-community-health-sciences/)
Academic Staff: Please refer to the Community Health Sciences website (https://umanitoba.ca/medicine/department-community-health-sciences/#faculty-and-staff) for Faculty information.

Community Health Sciences Program Information

CHS offers broad, multidisciplinary graduate training at the Master and Doctoral levels in the concepts and methods of the population-based health sciences and their application in the practice of public health and preventive medicine.

The Doctoral program is designed to produce individuals who will teach in the community health sciences, train other researchers, design and execute major research projects, and serve as senior advisors and consultants in the area of health care policy and planning.

In contrast, our two Master's programs, the Master of Science and Master of Public Health degrees, are intended to satisfy the demand of local, regional, provincial and federal health departments for trained community health professionals. The M.Sc. program has a research focus requiring completion of a thesis while the M.P.H. program has a field-placement integrating applied public health concepts.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Community Health Sciences Ph.D. Admission Requirements

The Ph.D. program is open to individuals with research-based M.A. and M.Sc. degrees. A thesis advisor must be identified at the time of application.

Please note that Community Health Sciences requires English Language Proficiency test scores (https://umanitoba.ca/explore/programs-of-study/community-health-sciences-phd/#admission-requirements) above the FGS minimum requirement.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Community Health Sciences Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/community-health-sciences-phd/) page.

Degree Requirements

Eighteen credit hours of coursework from 7000-level courses (six from required courses, twelve from electives), candidacy examination and thesis. In addition, twelve credit hours of prerequisite courses, or their equivalents, must have been completed before entering the program or must be taken during the first year in the PhD program.

Expected Time to Graduate: 4 years full-time, 6 years part-time

Progression Chart

Admitted With an MSc in Community Health Sciences

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
CHSC 8600	Senior seminar in Community Health Sciences	3
Select one of the following:		3
CHSC 7540	Advanced Epidemiology	
CHSC 7740	Advanced Qualitative Research Methods in Community Health Sciences	
CHSC 7830	Advanced Biostatistics for Community Health Sciences	
CHSC 7XXX	Four Approved Elective Courses designated as 7000 level offered by Community Health Sciences [1]	12
	Hours	**18**
Year 2		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis (Proposal Work / Proposal Defense, Research)	0
	Hours	**0**

Years 3-4		
GRAD 8000	Doctoral Thesis (Thesis Research continued, Write up and Defense)	0
	Hours	**0**
	Total Hours	**18**

[1] On the recommendation of the student's advisor and on the approval of the Director of Community Health Sciences graduate program elective courses may be taken in other departments.

Admitted Without an MSc in Community Health Sciences

Course	Title	Hours
Year 1		
Required		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Prerequisites		
The following courses may count toward the PhD requirement of 12 electives credit hours: [1]		
CHSC 7320	Organization and Financing of the Canadian Health Care System	
CHSC 7520	Principles of Epidemiology	
CHSC 7860	Methods and Concepts for Community Health Sciences	
Select one of the following:		
CHSC 7820	Biostatistics for Community Health Sciences [2]	
CHSC 7810	Biostatistics for the Health and Human Sciences	
CHSC 7738	Qualitative Research Methods in Community Health Sciences	
Formal Course Requirements		
CHSC 8600	Senior seminar in Community Health Sciences	3
Select one of the following:		3
CHSC 7540	Advanced Epidemiology	
CHSC 7740	Advanced Qualitative Research Methods in Community Health Sciences	
CHSC 7830	Advanced Biostatistics for Community Health Sciences	
CHSC 7XXX	Four Approved Elective Courses designated as 7000 level offered by Community Health Sciences [3]	12
	Hours	**18**
Year 2		
GRAD 8010	Doctoral Candidacy Examination	0
GRAD 8000	Doctoral Thesis (Proposal Work / Proposal Defense, Research)	0
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis (Thesis Research continued, Write up and Defense)	0
	Hours	**0**
	Total Hours	**18**

[1] The following courses are considered prerequisites to the PhD program which may or may not be required, depending on the student's background, Master's degree and training. These courses *may* count toward the PhD requirement of 12 electives credit hours.

[2] Since an undergraduate level course in Statistics is a pre-requisite for CHSC 7820, all students must have completed such a course at time of admission, or will be required to take additional statistical training if they intend to complete CHSC 7820.

[3] On the recommendation of the student's advisor and on the approval of the Director of Community Health Sciences graduate program elective courses may be taken in other departments.

Total Credit Hours: 18 – 24 as standard; up to **12** credit hours as auxiliary which in some instances may represent the necessary prerequisites.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Part of the process prior to registration may include obtaining permission from the relevant course instructor (see course catalog for courses needing instructor permission). All course additions and withdrawals must have prior advisor approval. Students should register themselves via Aurora Student on the University of Manitoba website. If students encounter difficulties with registration they may contact the Community Health Sciences Graduate Program office for assistance.

It should be noted that not all courses are offered each year and some courses will be held with a minimum enrolment. Please check Aurora class schedule for a list of current course offerings.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Genetic Counselling, M.Sc.

Genetic Counselling
Head: Dr. B. Triggs-Raine
Associate Head: Dr. S. Gibson
Grad Chair: Ms. J. Hartley
Campus Address/General Office: 336 - 745 Bannatyne Avenue
Telephone: 204-789-3593
Fax: 204-789-3900
Email Address: bmgadmin@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-biochemistry-and-medical-genetics (https://umanitoba.ca/medicine/medicine/department-biochemistry-and-medical-genetics/)
Academic Staff: Please refer to the Biochemistry website (https://umanitoba.ca/medicine/biochemistry-and-medical-genetics/faculty-staff/#genetic-counselling) for Faculty information.

Genetic Counselling Program Information

The Genetic Counselling Program offers a Master of Science degree in Genetic Counselling. This program is accredited by the Accreditation Council for Genetic Counseling (ACGC). Graduates will be eligible to sit for certification through the American Board of Genetic Counseling (ABGC) and/or the Canadian Association of Genetic Counsellors (CAGC).

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Genetic Counselling M.Sc. Admission Requirements

Applicants require the following:

- Bachelor's degree (or equivalent) that should include undergraduate genetics courses in principles of genetics, cell biology, human genetics and molecular biology
- At least one course in psychology
- Courses in developmental biology, statistics and embryology are an asset but not required
- Minimum 3.7 GPA (on a 4.5 scale) or equivalent in the most recent 60 credit hours of university study
- Practical counselling experience (ex: crisis programs, planned parenthood, peer-to-peer counselling, which usually have a training component)

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Genetic Counselling M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/genetic-counselling-msc/) page.

Degree Requirements

Students must submit an acceptable thesis and pass an oral thesis examination, all clinical rotations, ancillary experiences and 30 credit hours of coursework.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
BGEN 7000	Research Seminar M.Sc. [1]	1
BGEN 7090	Principles and Practice of Human Genetics	3
BGEN 7130	Genetic Epidemiology of Human Populations	3
BGEN 7142	Clinical Genetics 1	3
BGEN 7144	Clinical Genetics 2	3
Select one of the following:		3
IMED 7410	Biomedical Trainee Skills	
3 credit hour Elective in Research Methodology		
BGEN 7270	Introduction to Genetic Counselling Clinic Rotation	4
Counselling Skills 1 (Extended Education)		0
Counselling Elective (Extended Education) [2]		0
5-week Clinical Rotation External to Manitoba		
	Hours	**20**
Year 2		
GRAD 7000	Master's Thesis	0
BGEN 7000	Research Seminar M.Sc. [1]	1
BGEN 7280	Advanced Genetic Counselling Clinic Rotation	4
BGEN 7160	Theory and Practice of Genetic Counselling	3
BGEN 7040	Seminars in Human Genetics	3
	Hours	**11**
	Total Hours	**31**

1 BGEN 7000 is one credit hour over the course of the program.

2 The elective course will be selected from Counselling Skills II (COUNS 0200), Working with Families (COUNS 0240) or Counselling Theories (COUNS 0202) selected in consultation with the program director based on past experience and training (as documented). For course descriptions please visit https://umextended.ca/

Ancillary Requirements

- Course on Research Ethics (CORE)
- Personal Health Information (PHIA) session
- Attend one Patient Support Group Meeting
- Complete one Community Outreach presentation
- Participate in Molecular Diagnostic Out of Centre Meeting
- Participate in Pan-Can Genetic Counselling Rounds
- Participate in Genetic Academic Session:
  a. Present at One Genetic Academic Session per Year
  b. Lead One Journal Club Per Year

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning graduate students in the department of Biochemistry and Medical Genetics are required to complete a Course Approval Form in consultation with their supervisor **prior** to registering for courses and making program changes. The Course Approval Form must be signed by the student, supervisor, graduate chair or the department head and submitted to the graduate program coordinator. Only courses that are included on the Course Approval Form will be credited to the student's program. All course additions and withdrawals (registration revision) must be approved in the same manner by completing or filling out the Registration Revision Form available on the website.

Consult the department office or browse the web for a list of course offerings.

It should be noted that not all courses are offered every year and some courses will be held only with a minimum enrolment. Please check the Aurora catalog to find out when a course is offered.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Human Anatomy and Cell Science, M.Sc.

Human Anatomy and Cell Science
Head: S. Hombach-Klonisch
Campus Address/General Office: 130 Basic Medical Sciences Building, 745 Bannatyne Avenue
Telephone: 204-789-3411
Fax: 204-789-3920
Email Address: hacs.info@umanitoba.ca
Website: umanitoba.ca/medicine/human-anatomy-and-cell-science (https://umanitoba.ca/medicine/human-anatomy-and-cell-science/)
Academic Staff: Please see the HACS website (https://umanitoba.ca/medicine/human-anatomy-and-cell-science/#faculty-and-staff) for Faculty information.

Human Anatomy Program Information

The Department of Human Anatomy and Cell Science (HACS) offers graduate training at both the Master of Science and Doctor of Philosophy levels.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Human Anatomy and Cell Science M.Sc. Admission Requirements

The following categories of students may be accepted for graduate study in this department:

- Four-year undergraduate Science degree
- Students who have completed a three-year general undergraduate degree may be admitted following completion of the required pre-Master's courses. Contact the Department for details.
- Graduates in medicine or dentistry holding M.D., D.M.D. (D.D.S.), or equivalent degrees.
- Other suitable graduates will be considered.

The minimum standard for acceptance into any graduate program in the Department of HACS is a 3.5 Grade Point Average (GPA) or equivalent in the last two previous years of full time university study (60 credit hours).

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Human Anatomy Cell Science M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/human-anatomy-and-cell-science-msc/) page.

Degree Requirements

Students are required to take Biomedical Trainee Skills (IMED 7410) plus 6 credit hours of approved coursework at the 7000 level. Students must then complete a thesis.

Mandatory attendance at seminars that are part of the Departmental Seminar Program is required.

A written research proposal must be submitted to the department for approval within six months of the student's entering the program.

Expected Time to Graduate: 2-3 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMED 7410	Biomedical Trainee Skills	3
ANAT/IMED 7XXX	Approved coursework designated 7000 level including at least one 3 CH course from the Core ANAT list below [1]	6
	Hours	**9**
Year 2		
GRAD 7000	Master's Thesis [2]	0
	Hours	**0**
	Total Hours	**9**

1 The coursework required for an individual student will be specified in consultation with the student's faculty advisor, and will depend upon the student's background.

2 M.Sc. students will normally be required to present at least one paper (poster or platform) at a scientific meeting before submission of their thesis for examination.

Approved Coursework

Course	Title	Hours
Core ANAT Courses		
ANAT 7380	Human Developmental Anatomy (Embryology)	3
ANAT 7392	Human Neuroanatomy	3
ANAT 7468	Human Histology: Basic Tissues and Organ Systems	3
ANAT 7478	Human Gross Anatomy: Musculoskeletal	3
ANAT 7480	Human Gross Anatomy: Trunk (Thorax, Abdomen, Pelvis)	3
ANAT 7482	Human Gross Anatomy: Head and Neck	3
ANAT / IMED Electives [1]		
ANAT 7012	Advanced Brain Imaging Methods	1.5
ANAT 7014	Functional Human Anatomy	2
ANAT 7320	Introduction to Scanning and Transmission Electron Microscopy	3
ANAT 7330	Readings in Anatomy	3
IMED 7004	Human Brain Imaging Methods	1.5
IMED 7112	Fundamental Cellular Neurobiology	1.5
IMED 7114	Fundamental Neural Development and Plasticity	1.5
IMED 7302	Advanced Molecular Imaging	3

1 Additional elective coursework at the 7000 level may be completed through other U of M departments/faculties, or include any of the listed ANAT / IMED elective courses taught by HACS faculty.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All programs of study must be approved by the Chair of Graduate Studies or by the department.

Not all courses are offered each year. Please consult with your Advisor and the department office or check with the catalog for a list of courses offered.

Students should register themselves by signing up for the Aurora Student on-line service of the University of Manitoba website. All course additions and or withdrawals (registration revisions) must be approved by the department.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-

requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Human Anatomy and Cell Science, Ph.D.

Human Anatomy and Cell Science
Head: S. Hombach-Klonisch
Campus Address/General Office: 130 Basic Medical Sciences Building, 745 Bannatyne Avenue
Telephone: 204-789-3411
Fax: 204-789-3920
Email Address: hacs.info@umanitoba.ca
Website: umanitoba.ca/medicine/human-anatomy-and-cell-science (https://umanitoba.ca/medicine/human-anatomy-and-cell-science/)
Academic Staff: Please see the HACS website (https://umanitoba.ca/medicine/human-anatomy-and-cell-science/#faculty-and-staff) for Faculty information.

Human Anatomy Program Information

The Department of Human Anatomy and Cell Science (HACS) offers graduate training at both the Master of Science and Doctor of Philosophy levels.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Human Anatomy and Cell Science Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

The minimum standard for acceptance into any graduate program in the Department of HACS is a 3.5 Grade Point Average (GPA) or equivalent in the last two previous years of full time university study (60 credit hours).

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Human Anatomy Cell Science Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/human-anatomy-and-cell-science-phd/) page.

Degree Requirements

Students are required to take Biomedical Trainee Skills (IMED 7410) plus a minimum of 9 credit hours of approved coursework at the 7000 level. Students must then complete a thesis.

Mandatory attendance at seminars that are part of the Departmental Seminar Program is required.

Expected Time to Graduate: 4-5 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMED 7410	Biomedical Trainee Skills	3
ANAT/IMED 7XXX	Approved coursework designated 7000 level including at least one 3 CH course from the Core ANAT list below [1]	9
	Hours	**12**
Years 2-3		
GRAD 8010	Doctoral Candidacy Examination	0
Thesis Proposal [2]		
	Hours	**0**
Years 3-4		
GRAD 8000	Doctoral Thesis [3]	0
	Hours	**0**
	Total Hours	**12**

1. The coursework required for an individual student will be specified in consultation with the student's faculty advisor, and will depend upon the student's background.
2. The thesis proposal should be completed within two years of entering the program.
3. Prior to submission of their thesis for examination, the student normally will be expected to have presented their research at scientific meetings; and, contributed to a manuscript that is submitted, in press, or published.

Approved Coursework

Course	Title	Hours
Core ANAT Courses		
ANAT 7380	Human Developmental Anatomy (Embryology)	3
ANAT 7392	Human Neuroanatomy	3
ANAT 7468	Human Histology: Basic Tissues and Organ Systems	3
ANAT 7478	Human Gross Anatomy: Musculoskeletal	3
ANAT 7480	Human Gross Anatomy: Trunk (Thorax, Abdomen, Pelvis)	3
ANAT 7482	Human Gross Anatomy: Head and Neck	3
ANAT 7400	Morphological Techniques	3
ANAT 7460		1.5
ANAT / IMED Electives [1]		
ANAT 7012	Advanced Brain Imaging Methods	1.5
ANAT 7014	Functional Human Anatomy	2

ANAT 7320	Introduction to Scanning and Transmission Electron Microscopy	3
IMED 7004	Human Brain Imaging Methods	1.5
IMED 7112	Fundamental Cellular Neurobiology	1.5
IMED 7114	Fundamental Neural Development and Plasticity	1.5
IMED 7302	Advanced Molecular Imaging	3
ANAT 7330	Readings in Anatomy	3

[1] Additional elective coursework at the 7000 level may be completed through other U of M departments/faculties, or include any of the listed ANAT / IMED elective courses taught by HACS faculty.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All programs of study must be approved by the Chair of Graduate Studies or by the department.

Not all courses are offered each year. Please consult with your Advisor and the department office or check with the catalog for a list of courses offered.

Students should register themselves by signing up for the Aurora Student on-line service of the University of Manitoba website. All course additions and or withdrawals (registration revisions) must be approved by the department.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Immunology, M.Sc.

Immunology
Head: A. Marshall
Campus Address/General Office: 471 Apotex Centre, 750 McDermot Avenue
Telephone: 204-977-5610
Email Address: Angela.Peloquin@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-immunology (https://umanitoba.ca/medicine/medicine/department-immunology/)
Academic Staff: Please see the Immunology website (https://umanitoba.ca/medicine/medicine/department-immunology/#faculty-and-staff) for Faculty information.

Immunology Program Information

The Department offers a diverse program of graduate studies and research in Immunology, leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Immunology M.Sc. Admission Requirements

The Department of Immunology requires a minimum TOEFL score of 250 (computer based) or 88 (internet based, with a minimum of 20 points from each section of the test). In most cases a grade point average (GPA) above 3.5 is needed to be competitive for available positions in the program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Immunology M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/immunology-msc/) page.

Degree Requirements

The minimum course load consists of 9 credit hours of IMMU courses at the 700 level. Must include IMMU 7070 and IMMU 7100. Students must submit an acceptable thesis and pass a thesis oral examination.

Expected Time to Graduate: 2 - 3 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMMU 7070	Introductory Immunology	3
IMMU 7100	Advanced Topics in Immunology	3
Approved coursework at the 7000 level		3
	Hours	**9**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**9**

Notes:

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- An outline of the proposed thesis research must be presented orally to the advisory committee, in a closed session, within the first 3 months of the program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students must meet with their advisor to determine their program of study prior to registration. Once the student has met with their advisor and subsequently receives approval from the Department Head, they must contact the Administrative Assistant, who will register the student in their courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Immunology, Ph.D.

Immunology
Head: A. Marshall
Campus Address/General Office: 471 Apotex Centre, 750 McDermot Avenue
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Academic Staff: Please see the Immunology website (https://umanitoba.ca/medicine/medicine/department-immunology/#faculty-and-staff) for Faculty information.

Immunology Program Information

The Department offers a diverse program of graduate studies and research in Immunology, leading to Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Immunology Ph.D. Admission Requirements

The Department of Immunology requires a minimum TOEFL score of 250 (computer based) or 88 (internet based, with a minimum of 20 points from each section of the test.). In most cases a grade point average (GPA) above 3.5 is needed to be competitive for available positions in the program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Immunology Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/immunology-phd/) page.

Degree Requirements

Candidates admitted directly into the Ph.D. program or wishing to transfer from the M.Sc. to the Ph.D. program must pass a thesis proposal defence taken within the first 18 or 16 months, respectively, of their admission into the Department. In addition, the candidacy examination required of all students in the Ph.D. program will be in the form of a research proposal.

Expected Time to Graduate: 4 - 5 years

Progression Chart

9 Credit Hour Option

Students Entering With a M.Sc. Degree in Immunology [1]

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
	Hours	**0**
Year 2		
IMMU XXXX	Courses in an area of the department	6
COURSE 7XXX	Approved coursework designated 7000 level	3
Thesis Proposal [2]		
	Hours	**9**
Year 3		
GRAD 8010	Doctoral Candidacy Examination [3]	0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**9**

1. Students entering with a M.Sc. degree in Immunology do not need to take the IMMU 7070 or IMMU 7100. They will only need to take at least 6 credit hours offered by Immunology and/or other graduate departments.
2. The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.
3. The written component of the exam is in the form of a grant proposal to a major funding agency.

Notes:

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

15 Credit hour Option

M.Sc. Students Entering Without Adequate Background in Immunology

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMMU 7070	Introductory Immunology	3
IMMU 7100	Advanced Topics in Immunology	3
IMMU XXXX	Courses in an area of the department	3
	Hours	**9**
Year 2		
IMMU XXXX	Courses in an area of the department	3
COURSE 7XXX	Approved coursework designated 7000 level	3
Thesis Proposal [1]		
	Hours	**6**
Year 3		
GRAD 8010	Doctoral Candidacy Examination [2]	0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**15**

1. The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.
2. The written component of the exam is in the form of a grant proposal to a major funding agency.

Notes:

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

18 Credit Hour Option

Students Entering with an Honours Bachelor Degree

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
IMMU 7070	Introductory Immunology	3
IMMU 7100	Advanced Topics in Immunology	3
IMMU XXXX	Courses in an area of the department	3
	Hours	**9**
Year 2		
IMMU XXXX	Courses in an area of the department	3
COURSE 7XXX	Approved coursework designated 7000 level	6

Thesis Proposal [1]		
	Hours	**9**
Year 3		
GRAD 8010	Doctoral Candidacy Examination [2]	0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**18**

1 The thesis proposal is normally initiated within 18 months of beginning graduate studies in the Department, and must be completed within two years of starting the program.

2 The written component of the exam is in the form of a grant proposal to a major funding agency.

Notes:

- All students are required to attend the weekly Immunology Research Seminar and weekly Immunology Journal Club for the duration of their program (2 hours per week Sept-May), and do a presentation once per year in each program. A minimum 80% attendance is required.
- Within the first 3 months of the program, advisory committee members should be presented with an outline of the proposed research.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

All new and returning students must meet with their advisor to determine their program of study prior to registration. Once the student has met with their advisor and subsequently receives approval from the Department Head, they must contact the Administrative Assistant, who will register the student in their courses.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Medical Microbiology & Infectious Diseases, M.Sc.

Medical Microbiology and Infectious Diseases
Head: Dr. Keith Fowke
Campus Address/General Office: 543 Basic Medical Sciences Building, 745 Bannatyne Avenue
Telephone: 204-789-3444
Fax: 204-789-3926
Email Address: angela.nelson@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-medical-microbiology-and-infectious-diseases (https://umanitoba.ca/medicine/medicine/department-medical-microbiology-and-infectious-diseases/)
Academic Staff: Please refer to the Medical Microbiology website (https://umanitoba.ca/medicine/medicine/department-medical-microbiology-and-infectious-diseases/#faculty-and-staff) for academic staff information.

Medical Microbiology and Infectious Diseases Program Information

The Department of Medical Microbiology and Infectious Diseases offers programs of study leading to the Master of Science and Doctor of Philosophy degrees with research and academic experience suitable for a career in Basic Microbiology or Infectious Diseases.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Medical Microbiology and Infectious Diseases M.Sc. Admission Requirements

Graduates in Medicine, Dentistry, Veterinary Medicine, or general Science may apply for entry into this graduate program. The department requires that an incoming student have a minimum Grade Point Average of 3.0, or its equivalent, in the 60 credit hours (or two years depending on the type of transcript) immediately preceding first registration. Students with a three-year B.Sc. degree must normally enrol in a pre-Master's course arranged in consultation with the Graduate Studies Committee and the head of the department.

Pre-Master's Option

This unit offers a Pre-Master's program of study (p. 97). The Pre-Master's program of study is intended to bring a student's background up to the equivalent of the required 4-year degree in the major department/unit, and to provide the student with any necessary prerequisites for courses to be taken in the Master's program. Completing the Pre-Master's program does not guarantee acceptance to the Master's program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Medical Microbiology and Infectious Diseases M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/medical-microbiology-and-infectious-diseases-msc/) page.

Degree Requirements

The minimum of 12 credit hours of coursework in Medical Microbiology and Infectious Diseases normally includes the departmental required course MMIC 7050 Microbial Pathogenicity (6 credit hours) plus 6 additional credit hours at the 6000 level or above. Students must also complete a thesis.

Students are required to participate in the Medical Microbiology and Infectious Diseases seminar and graduate journal club programs, which meet regularly.

Expected Time to Graduate: 2 - 3 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7020	Master's Re-registration [1]	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial [2]	0
MMIC 7050	Microbial Pathogenicity [3]	6
Select 6 credit hours at the 6000 level or above (not restricted to home department)		6
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis [4]	0
	Hours	**0**
	Total Hours	**12**

1. Must be included in registration every term throughout the program.
2. All graduate students must register for and complete GRAD 7500 in their first term of study. This is a zero (0) credit-hour course intended to introduce students to their basic responsibilities regarding academic integrity and to the resources available to them.
3. Successful completion of this course is a department requirement to graduate.
4. Must present proposal to Student Advisory Committee for approval.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Students should register themselves by signing up for the Aurora Student service on the University of Manitoba website. If difficulties are incurred students may contact the Graduate Studies Committee Office Assistant as per the information below.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Not all courses are offered each year.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Medical Microbiology and Infectious Diseases, Ph.D.

Medical Microbiology and Infectious Diseases
Head: Dr. Keith Fowke
Campus Address/General Office: 543 Basic Medical Sciences Building, 745 Bannatyne Avenue
Telephone: 204-789-3444
Fax: 204-789-3926
Email Address: angela.nelson@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-medical-microbiology-and-infectious-diseases (https://umanitoba.ca/medicine/medicine/department-medical-microbiology-and-infectious-diseases/)
Academic Staff: Please refer to the Medical Microbiology website (https://umanitoba.ca/medicine/medicine/department-medical-microbiology-and-infectious-diseases/#faculty-and-staff) for academic staff information.

Medical Microbiology and Infectious Diseases Program Information

The Department of Medical Microbiology and Infectious Diseases offers programs of study leading to the Master of Science and Doctor of Philosophy degrees with research and academic experience suitable for a career in Basic Microbiology or Infectious Diseases.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Medical Microbiology and Infectious Diseases Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Medical Microbiology and Infectious Diseases Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/medical-microbiology-and-infectious-diseases-phd/) page.

Degree Requirements

Where admission to the Ph.D. is directly from a Master's Degree, a minimum of 6 credit hours at the 7000 level or higher plus a thesis is required. Any further coursework beyond the minimum 6 credit hours at the 7000 level must be at the 3000 level or above.

Where students have completed the minimum of 12 credit hours of 7000 level coursework required to transfer to the Ph.D., 6 additional credit hours of 7000 level or higher coursework plus a thesis are required.

If the candidate has not already taken a course during their prior Master's degree studies that is equivalent to MMIC 7050 Microbial Pathogenicity (as determined by the department Head, or designate), then this course must normally be taken as part of the Ph.D. program of study.

Expected Time to Graduate: 5 - 6 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
MMIC 7050	Microbial Pathogenicity [1]	0-6
Courses at the 7000 level or above		6
	Hours	**6-12**
Years 2-5		
GRAD 8010	Doctoral Candidacy Examination [2]	0
GRAD 8000	Doctoral Thesis	0
GRAD 8020	Doctoral Re-registration	0
	Hours	**0**
	Total Hours	**6-12**

1 If not already completed during prior Master's degree studies.

2 The candidacy exam will be taken by all Ph.D. students no later than 12 months prior to their expected graduation date and preferably much earlier given possible time constraints due to overlaps with thesis writing.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. Students should register themselves by signing up for the Aurora Student service on the University of Manitoba website. If difficulties are incurred students may contact the Graduate Studies Committee Office Assistant as per the information below.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Not all courses are offered each year.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Micro-Diploma in Science Communication

Immunology
Head: A. Marshall
Campus Address/General Office: 471 Apotex Centre, 750 McDermot Avenue
Telephone: 204-977-5610
Email Address: Angela.Peloquin@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-immunology (https://umanitoba.ca/medicine/medicine/department-immunology/)
Academic Staff: Please see the Immunology website (https://umanitoba.ca/medicine/immunology/faculty-staff/) for Faculty information.

Micro-Diploma in Science Communication Information

The purpose of this micro-diploma is to promote an in-depth understanding of science communication as a field of practice. Upon completion, students will better appreciate that communication breakdown can undermine public understanding and confidence in science.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-micro-diploma/).

Micro-Diploma in Science Communication Admission Requirements

The Micro-Diploma in Science Communication is only open to those who are currently registered in the Faculty of Graduate Studies at the University of Manitoba in one of the listed graduate programs (https://umanitoba.ca/medicine/medicine/department-immunology/#what-we-offer).

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Micro-Diploma in Science Communication program of study (https://umanitoba.ca/explore/programs-of-study/micro-diploma-science-communication/) page.

Degree Requirements

The program requires students to complete two courses for a total of six credit hours:

IMMU 7000 Science Communication: Foundations and Writing Methodologies (3 CH); and
IMMU 7010 Science Communication: Audio-video Methodologies (3 CH)

Students are required to achieve a minimum grade of "B" in mandatory courses.

Expected Time to Completion: 1 academic year (3 consecutive terms)

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Program Requirements

A Graduate Micro-Diploma is a short, flexible program of study focused on core knowledge in a field or interdisciplinary field of study at the graduate level. A Graduate Micro-Diploma consists of a minimum of six (6) credit hours to a maximum of nine (9) credit hours of coursework at the 7000-level or above. It may be stand alone and/or embedded in a graduate degree. A minimum of six (6) credit hours must be delivered by The University of Manitoba.

All students should consult department/unit supplementary regulations for specific details regarding a particular Graduate Micro-Diploma.

Admission

Students who are eligible to be considered for direct admission to a program of study leading to the Graduate Micro-Diploma include:

- Graduates of four (4)-year undergraduate degree programs (or equivalent as deemed by the Faculty of Graduate Studies) from:

- Canadian institutions empowered by law to grant degrees; or
- Colleges and universities outside Canada which are officially recognized by the Faculty of Graduate Studies.

- Graduates from first-cycle Bologna compliant degrees.
- Students who have completed a Pre-Master's program from:
  - The University of Manitoba (see General Regulations - Pre-Master's (https://catalog.umanitoba.ca/graduate-studies/academic-guide/general-regulations-pre-masters/)); or
  - Canadian institutions empowered by law to grant degrees; or
  - Colleges and universities outside Canada which are officially recognized by The Faculty of Graduate Studies.

All students applying for a Graduate Micro-Diploma program must have attained a minimum GPA of 3.0 in the last two (2) previous years of full-time university study (60 credit hours). This includes those applying for direct admission and those entering from a Pre-Master's program. Students who meet the minimum requirements for admission to the Faculty of Graduate Studies are not guaranteed admission.

Note: This is the minimum requirement of the Faculty of Graduate Studies and departments/units may have higher standards and additional criteria.

Performance in Coursework

Students can consult Student Accessibility Services (SAS) if accommodations are required for coursework (see Accessibility Policy and Procedures (p. 20)).

A minimum degree grade point average (DGPA) of 3.0 with no grade below C+ must be maintained to continue in the Faculty of Graduate Studies. Departments/Units may specify, in their supplementary regulations, standards that are higher than those of the Faculty of Graduate Studies. Students who fail to maintain the specified grades or DGPA will be Required to Withdraw unless a department/unit recommends remedial action. Any such action must be approved by the Dean of the Faculty of Graduate Studies or designate.

Requirements for Remedial Action Plan

A student may be permitted to remediate deficiencies in grades by repeating the course or replacing it with an equivalent substitute course as determined by the department/unit. In the event that a substitute course is used for remediation, the substituted course must be at the same or higher level as the failed course (e.g., at the graduate level for a failed graduate-level course). Each failed course may be repeated or replaced only once, to a maximum of three (3) credit hours of coursework. If a course is repeated or replaced, the highest grade obtained will be used in the determination of the degree grade point average. Students receiving a grade of "C" or less in more than three (3) credit hours of coursework are usually Required to Withdraw from the Micro-Diploma, unless otherwise stated in the department/unit's supplementary regulations. A student may also be permitted the opportunity to improve a low DGPA as determined by the Graduate Chair of the student's department/unit through the registration and completion of additional course(s).

Students are usually expected to complete remedial action by the end of the subsequent term.

Graduate students are not permitted to repeat a previously passed course, unless the department/unit recommends that course(s) be re-taken if they have lapsed or expired (refer to Master's Degree General Regulations (p. 103) and Doctor of Philosophy General Regulations (p. 109)).

Note:

In exceptional circumstances, the department/unit may appeal to the Faculty of Graduate Studies for approval of remedial recommendation(s) falling outside those prescribed above.

Supplemental exams are not permitted to students in the Graduate Micro-Diploma program, unless otherwise stated in the department/unit's supplementary regulations.

Time in Program

The expected time-to-completion for students in the Micro-Diploma program is one (1) academic year (i.e., three (3) consecutive terms). Micro-Diploma students are subject to the same re-registration requirements as all other graduate students.

Transfer Credit

Courses within a program of study may be taken elsewhere and transferred for credit at The University of Manitoba. All such courses:

- must be approved for transfer to the program of study by the department/unit and the Faculty of Graduate Studies before the student may register for them;
- are considered on an individual basis;
- cannot usually be used for credit towards another degree;
- may not exceed three (3) credit hours of coursework required of the student's Graduate Micro-Diploma program at The University of Manitoba, so long as six (6) credit hours of the Graduate Micro-Diploma program is taken at the University of Manitoba.

Permission is granted in the form of a Letter of Permission (https://umanitoba.ca/graduate-studies/programs-study/courses-taken-elsewhere/#letter-of-permission) which may be obtained by making an application to the Faculty of Graduate Studies; an original transcript and course equivalency must be provided.

Recognition for Credit

Graduate-level courses completed as part of a Graduate Micro-Diploma may be recognized toward a Graduate Diploma or graduate degree program (where appropriate) and subject to the Senate approved program regulations. Graduate Micro-Diplomas may be stackable or laddered (refer to definitions per the Certificate and Diploma Framework (https://umanitoba.ca/admin/governance/media/Certificate_and_Diploma_Framework_2021_02_03.pdf)) into Graduate Diplomas or graduate degree programs in same or related fields of study.

Pathology and Laboratory Medicine, Ph.D.

Pathology
Head: Dr. Gabor Fischer
Campus Address/General Office: 401 Brodie Centre, 727 McDermot Avenue
Telephone: 204-789-3212
Fax: 204-789-3931
Email Address: pathology@umanitoba.ca

Website: umanitoba.ca/medicine/medicine/department-pathology (https://umanitoba.ca/medicine/medicine/department-pathology/)
Academic Staff: Please refer to the Pathology website (https://umanitoba.ca/medicine/department-pathology/faculty-staff/) for Academic staff information.

Pathology Program Information

The Department of Pathology offers programs of study leading to a Master of Science or Doctor of Philosophy degree. The Ph.D. in Pathology and Laboratory Medicine program focuses on the research at the molecular, tissue, animal and clinical levels to understand the changes associated with diseases.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Pathology and Laboratory Medicine Ph.D. Admission Requirements

Applicants must hold an M.Sc. degree in a related Biological Science or any related medical field discipline. The minimum standard for acceptance into the Department of Pathology is a 3.2 Grade Point Average (GPA) or equivalent in the last two previous years of full time university study (60 credit hours).

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pathology and Laboratory Medicine Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/pathology-laboratory-medicine-phd/) page.

Degree Requirements

The Ph.D. in Pathology and Laboratory Medicine program consists of a minimum 12 credit hours of coursework and a supervised research project to be presented as an acceptable thesis.

Students are required to take, and achieve a minimum grade of B in, IMED 7212 Introduction to Disease Mechanisms (3 CH), as well as 9 credit hours of 7000 or 8000 level courses. Course selection should be made in consultation with the student's advisor.

Additional requirements include attendance at the Annual Departmental Research Day and at least one Departmental presentation each year. Weekly Grand Round Seminar Series is optional but students are encouraged to attend whenever possible.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
IMED 7212	Introduction to the Mechanisms of Disease	3
Thesis proposal		
	Hours	**3**
Years 1-2		
Electives at the 7000 or 8000 level		9
	Hours	**9**
Year 3		
GRAD 8010	Doctoral Candidacy Examination [1]	0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**12**

[1] The Ph.D. candidacy exam is normally initiated within 3 years of beginning Ph.D. studies. The written component of the exam is in the form of a grant proposal to a major funding agency.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,

- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Pathology, M.Sc.

Pathology
Head: Dr. Gabor Fischer
Campus Address/General Office: 401 Brodie Centre, 727 McDermot Avenue
Telephone: 204-789-3212
Fax: 204-789-3931
Email Address: pathology@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-pathology (https://umanitoba.ca/medicine/medicine/department-pathology/)
Academic Staff: Please refer to the Pathology website (https://umanitoba.ca/medicine/department-pathology/faculty-staff/) for Academic staff information.

Pathology Program Information

The Department of Pathology offers a program of study leading to a Master of Science degree. Honours Science graduates with a strong background in biology can carry out coursework, plus one of: a research-based program and thesis; or, a practicum leading to a paramedical qualification as a Pathologist's Assistant.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Pathology M.Sc. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pathology M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/pathology-msc/) page.

Degree Requirements

M.Sc. Research/Thesis-based Program
All students in this program are required to take a minimum of 9 credit hours of coursework, to carry out a supervised research project, and to present an acceptable thesis.

Maximum time to complete the program is 4 years for full-time students.

M.Sc. Pathologists' Assistant Practicum Stream
All students are required to successfully complete the major courses as listed in Progression Chart below. Further requirements include:

1. Complete a Medical Terminology workbook/course prior to the start of the program.
2. Complete a log book of a required number of surgical and autopsy cases.
3. A written and Practical Examination is given at the completion of PATH 7036 and PATH 7042, for which students must acquire a Pass grade/or a grade equivalent to a B.
4. Successfully complete a research/practicum project on a subject related to Pathology work.

It is highly recommended that students complete this program in 2 years.

Progression Chart

Pathologists' Assistant Practicum Stream

A student must have passed the following courses outlined below and must have achieved a minimum grade of a B average in Introduction to Disease Mechanisms (IMED 7212). Students will also have to successfully complete a research/practicum project on a subject related to Pathology work and it will be defended as a Thesis.

Course	Title	Hours
Year 1		
ANAT 7472		2
ANAT 7474		2
ANAT 7476		2
IMED 7212	Introduction to the Mechanisms of Disease	3
PATH 7032	Pathologists Assistant Field Practicum I	4
PATH 7120	Diseases of Human Organ Systems	1.5
PATH 7034	Pathologists Assistant Field Practicum II	4
PATH 7036	Pathologists Assistant Field Practicum III	4
Research/Practicum Project [1]		
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
	Hours	**22.5**
Year 2		
GRAD 7000	Master's Thesis	0
PATH 7130	Clinical Pathological Correlations 1	1.5
PATH 7038	Pathologists Assistant Filed Practicum IV	4
PATH 7140	Clinical Pathological Correlations 2	1.5
PATH 7042	Pathologists Assistant Field Practicum V	4
Research/Practicum Project [2]		
	Hours	**11**
	Total Hours	**33.5**

1 Student will begin to start working on their research/practicum project on a subject related to Pathology work.
2 Student should almost be completed their research/practicum project which they will present by the end of summer term.

Research/Thesis-Based Program

All students in the program are required to take a minimum of 9 credit hours of coursework, to carry out a supervised research project, and to present an acceptable thesis.

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0

IMED 7212	Introduction to the Mechanisms of Disease	3
GRAD 7XXX	Additional Graduate Courses [1]	6
Thesis Outline [2]		
	Hours	**9**
Year 2		
GRAD 7000	Master's Thesis [3]	0
	Hours	**0**
	Total Hours	**9**

1. Additional credit hours at the 7000 level are mandatory to a total a minimum of 9 credit hours. These additional courses very from student to student and course select will be made in consultation with the advisor.
2. Three months following the commencement of their program and following consultation with their supervisor, the student should submit a detailed thesis outline to their committee for advice and approval. The outline should be 1-2 pages long, adhering to the following format: Introduction (Background); Hypothesis; Objectives; Proposed Methods/ Potential Significance of Work.
3. Students continue to work on their thesis. Students are required to allow 4 weeks for members of their advisory committee to read their thesis or practicum prior to the oral exam

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Pediatrics and Child Health, M.Sc.

Pediatrics and Child Health
Head: Dr. P. Birk
Director: Dr. J. Protudjer
Campus Address/General Office: TBD
Telephone: 204-787-8020
Fax: 204-787-4807
Email Address: pgpadmin@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-pediatrics-and-child-health (https://umanitoba.ca/medicine/medicine/department-pediatrics-and-child-health/)
Academic Staff: Please refer to the Pediatrics and Child Health website (https://umanitoba.ca/medicine/department-pediatrics-and-child-health/faculty-staff/) for Faculty information.

Pediatrics and Child Health Program Information

The department offers graduate programs leading to Master of Science and Doctor of Philosophy degrees. The Pediatric graduate programs offer students opportunities for cutting edge, multidisciplinary, collaborative and rigorous scientific training that emphasizes translational impact of their findings for the children for whom they care.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Pediatrics and Child Health M.Sc. Admission Requirements

To be considered for admission to this program, applicants must have a broadly health-related undergraduate degree, with a minimum 3.25 GPA and a minimum GPA of 3.25 in the last two years (60 credit hours) of study.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pediatrics and Child Health M.Sc. program of study (https://umanitoba.ca/explore/programs-of-study/pediatrics-child-health-msc/) page.

Degree Requirements

The Pediatrics and Child Health M.Sc. consists of a total of 12 credit hours and a thesis. The following courses are required for all students:

- PEDS 7010: Pediatric Biostatistics (3 CH)
- PEDS 7020: Introduction to Research Methods (3 CH)
- PEDS 7030: Equity, Diversity and Inclusion for Professionals (0 CH)
- PEDS 7050: Ethics and Equity in Child Health Research (3 CH)
- PEDS 7070: Reflexive Practice in Patient Engagement (0 CH)
- PEDS 7080: Indigenous Child Health (0 CH)

Students must select two of the following courses (representing the two pillars) which are not their home pillar:

- PEDS 7130: Multidisciplinary Immersion in Clinical Research (1.5 CH)
- PEDS 7150: Multidisciplinary Immersion in Basic Sciences (1.5 CH)
- PEDS 7160: Multidisciplinary Immersion in Population Health (1.5 CH)
- PEDS 7170: Multidisciplinary Immersion in Practice & Policy (1.5 CH)

Students must attend a minimum of 4 CHRIM Research Rounds per academic term, and must present at CHRIM Research Rounds a minimum of once at the MSc level, and twice at the PhD level.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
Term 1		
PEDS 7010	Introduction to Biostatistics in Child Health Research	3
PEDS 7020	Introduction to Research Methods	3
PEDS 7030	Equity, Diversity and Inclusion for Professionals	0
PEDS 7040 or PEDS 7060	Introduction to a Clinical Environment [1] or Considerations in the Delivery of Virtual Care in Pediatrics	0
PEDS 7080	Indigenous Child Health	0
GRAD 7500	Academic Integrity Tutorial	0
GRAD 7300	Research Integrity Tutorial	0
	Hours	**6**
Term 2		
PEDS 7050	Ethics and Equity in Child Health Research	3
PEDS 7070	Reflexive Practice in Patient Engagement	0
Ethics submission		
Research proposal submission		
	Hours	**3**
Year 2		
Term 1		
Students must select two of the following 1.5 CH courses which are not their home pillar:		3
PEDS 7130	Multidisciplinary Immersion in Clinical Research	
PEDS 7150	Multidisciplinary Immersion in Basic Sciences	
PEDS 7160	Multidisciplinary Immersion in Population Health	
PEDS 7170	Multidisciplinary Immersion in Policy and Practice	
Research project		
	Hours	**3**
Term 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**12**

[1] PEDS 7040 is required for non-clinical students
PEDS 7060 is required for clinical students

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Pediatrics and Child Health, Ph.D.

Pediatrics and Child Health
Head: Dr. P. Birk
Director: Dr. J. Protudjer
Campus Address/General Office: TBD
Telephone: 204-787-8020
Fax: 204-787-4807
Email Address: pgpadmin@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-pediatrics-and-child-health (https://umanitoba.ca/medicine/medicine/department-pediatrics-and-child-health/)
Academic Staff: Please refer to the Pediatrics and Child Health website (https://umanitoba.ca/medicine/department-pediatrics-and-child-health/faculty-staff/) for Faculty information.

Pediatrics and Child Health Program Information

The department offers graduate programs leading to Master of Science and Doctor of Philosophy degrees. The Pediatric graduate programs offer students opportunities for cutting edge, multidisciplinary, collaborative and rigorous scientific training that emphasizes translational impact of their findings for the children for whom they care.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Pediatrics and Child Health Ph.D. Admission Requirements

Applicants will normally possess a research-based Master's degree in a discipline or profession consistent with pediatrics and health, with a minimum GPA of 3.25 in the last 2 full years (60 credit hours) of study. Applicants who do not possess a research-based Master's degree, but who have some research experience will be assessed on a case-by-case basis, as will those with professional Master's degrees.

Students admitted to the PhD program without a research-based Master's degree will be required to complete two additional 3 credit hour courses, PEDS 7010 Pediatric Biostatistics; and, PEDS 7020 Introduction to Research Methods, in the first two terms of their program.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pediatrics and Child Health Ph.D. program of study (https://umanitoba.ca/explore/programs-of-study/pediatrics-child-health-phd/) page.

Degree Requirements

A minimum of 15 credit hours plus a thesis is required.

The following courses are required for all students:

- PEDS 7050 Ethics and Equity in Child Health Research (3 CH)
- PEDS 7030: Equity, Diversity and Inclusion for Professionals (0 CH)
- PEDS 7080: Indigenous Child Health (0 CH)
- GRAD 7500: Academic Integrity Tutorial (0 CH)
- GRAD 7300: Research Integrity Tutorial (0 CH)

Where a student has already completed similar courses to the Pediatric Graduate Program core courses, the student may, with the recommendation of their Advisory Committee and with the approval of the Chair of the Pediatric Graduate program, or their delegate, be exempted from taking the equivalent core courses and allowed to fulfill the 3 credit hours of core courses with 3 credit hours of other courses taken at the 7000-8000 level from any college or department in the Rady Faculty of Health Sciences.

Students must select two of the following four courses, representing the three pillars which are not their home pillar:

- PEDS 7130: Multidisciplinary Immersion in Clinical Research (1.5 CH)
- PEDS 7150: Multidisciplinary Immersion in Basic Sciences (1.5 CH)
- PEDS 7160: Multidisciplinary Immersion in Population Health (1.5 CH)
- PEDS 7170: Multidisciplinary Immersion in Practice & Policy (1.5 CH)

The following courses are offered as electives, usually to be taken during the second year of study:

- PEDS 7110: Directed Readings in Pediatric Literature (3 CH)
- PEDS 7140: Practical Epidemiology (6 CH)
- PEDS 7120: Foundations in Bioinformatics (3 CH):
- PEDS 7180: Practical Qualitative and Mixed Methods (3 CH)
- PEDS 7190: Medical Education, Ethics and Engagement (3 CH)

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
PEDS 7030	Equity, Diversity and Inclusion for Professionals	0
PEDS 7040 or PEDS 7060	Introduction to a Clinical Environment [1] or Considerations in the Delivery of Virtual Care in Pediatrics	0
PEDS 7050	Ethics and Equity in Child Health Research	3
PEDS 7080	Indigenous Child Health	0
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Ethics submission		
Research proposal		
	Hours	**3**
Year 2		
Select 9 credit hours of electives:		9
PEDS 7110	Directed Readings in Pediatric Literature	
PEDS 7120	Foundations in Bioinformatics	
PEDS 7140	Practical Epidemiology	
PEDS 7180	Practical Qualitative and Mixed Methods	

PEDS 7190	Medical Education, Ethics, and Engagement	
Students must select two of the following four courses, representing the three pillars which are not their home pillar:		3
PEDS 7130	Multidisciplinary Immersion in Clinical Research	
PEDS 7150	Multidisciplinary Immersion in Basic Sciences	
PEDS 7160	Multidisciplinary Immersion in Population Health	
PEDS 7170	Multidisciplinary Immersion in Policy and Practice	
	Hours	**12**
Year 3		
Research project		
GRAD 8010	Doctoral Candidacy Examination (written and oral)	0
	Hours	**0**
Year 4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**15**

[1] PEDS 7040 is required for students not having clinical training or background
PEDS 7060 is required for clinically-oriented students

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Pharmacology and Therapeutics, M.Sc.

Pharmacology and Therapeutics
Head: Chris Anderson
Campus Address/General Office: A205 Chown Building, 753 McDermot Avenue, Winnipeg, MB, R3E 0T6
Telephone: 204-789-3553
Email Address: pharmacology@umanitoba.ca
Website: umanitoba.ca/medicine/department-pharmacology-and-therapeutics (https://umanitoba.ca/medicine/department-pharmacology-and-therapeutics/)
Academic Staff: Please refer to the Pharmacology and Therapeutics website (https://umanitoba.ca/medicine/department-pharmacology-and-therapeutics/faculty-staff/) for Academic staff information

Pharmacology and Therapeutics Program Information

The department offers both Master of Science and Doctor of Philosophy degrees. A joint M.D.-Ph.D. program is available to students in Medicine.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Pharmacology and Therapeutics M.Sc. Admission Requirements

Qualified students holding B.Sc., M.Sc., B.Pharm., D.V.M. or M.D. degrees may apply for entry into Graduate Programs. Ancillary work in Pharmacology may be arranged for students pursuing their major studies in related departments.

Normally, a student will have a prospective advisor identified as a requirement for admission.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pharmacology

and Therapeutics M.Sc. program of study (https://umanitoba.ca/explore/pharmacology-and-therapeutics-msc/) page.

Degree Requirements

Course requirements will depend on prior degree held and research experience.

Expected Time to Graduate: 2 – 3 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHAC 7136	General Pharmacology	3
COURSE 7XXX	Approved coursework at the 7000 level	0-3
	Hours	**3-6**
Year 2		
PHAC 7222	Molecular Pharmacology 2	3
COURSE 7XXX	Approved coursework at the 7000 level	0-3
GRAD 7000	Master's Thesis	0
	Hours	**3-6**
	Total Hours	**6-12**

Notes:

- Students will be required to attend all departmental seminars, M.Sc. and Ph.D. thesis defences, student research presentations and any discussion sessions with visitors to the Department.
- Students will have an oral exam at the end of the first year of the program.
- Within ten months from the start of the program the student will present a thesis proposal to the Advisory Committee.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor and Pharmacology Director of Graduate Studies to determine their program of study.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Pharmacology and Therapeutics, Ph.D.

Pharmacology and Therapeutics
Head: Chris Anderson
Campus Address/General Office: A205 Chown Building, 753 McDermot Avenue, Winnipeg, MB, R3E 0T6
Telephone: 204-789-3553
Email Address: pharmacology@umanitoba.ca
Website: umanitoba.ca/medicine/department-pharmacology-and-therapeutics (https://umanitoba.ca/medicine/department-pharmacology-and-therapeutics/)
Academic Staff: Please refer to the Pharmacology and Therapeutics website (https://umanitoba.ca/medicine/department-pharmacology-and-therapeutics/faculty-staff/) for Academic staff information.

Pharmacology and Therapeutics Program Information

The department offers both Master of Science and Doctor of Philosophy degrees. A joint M.D.-Ph.D. program is available to students in Medicine.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Pharmacology and Therapeutics Ph.D. Admission Requirements

Students with a research based M.Sc. degree in a related field (Science, Pharmacy, and Nursing) may be admitted directly into the Ph.D. Program. Students with a B.Sc. (Hons) degree (or 4-year equivalent) and no graduate degree will first be admitted to the M.Sc. Program.

If recommended by the Advisory Committee and the Department Graduate Committee, an M.Sc. student may be encouraged to apply for transition into the Ph.D. Program. Students with an M.Sc. in an unrelated field will be evaluated on an individual basis.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Pharmacology and Therapeutics Ph.D. program of study (https://umanitoba.ca/explore/pharmacology-and-therapeutics-phd/) page.

Degree Requirements

Course requirements will depend on prior degree held and research experience. Entry with a B.Sc. (Hon) degree (or four year equivalent) may require a course schedule similar to that described for the M.Sc. degree. Students entering with a graduate degree (M.Sc.) will have a course schedule that is dependent on previous course work.

Expected Time to Graduate: 3 – 5 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
PHAC 7136	General Pharmacology	3
COURSE 7XXX	Approved coursework at the 7000 level [1]	0-3
	Hours	**3-6**
Year 2		
PHAC 7222	Molecular Pharmacology 2	3
COURSE 7XXX	Approved coursework at the 7000 level	0-3
GRAD 8010	Doctoral Candidacy Examination [1]	0
Thesis Proposal [1]		
	Hours	**3-6**
Years 3-4		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**6-12**

[1] A written thesis proposal is to be provided to the Advisory Committee at least two weeks prior to the proposal presentation date. The Candidacy Exam and Thesis Proposal must not be more than four weeks apart.

Notes:

- Students in the pharmacology M.Sc. program who elect to transfer to the Ph.D. program are required to take 15 credit hours at the 7000 level. Courses taken as part of the M.Sc. program will count toward this requirement.
- Students are expected to attend all departmental seminars, M.Sc. and Ph.D. thesis defences, student research presentations and any discussion sessions with visitors to the Department.
- Direct entry students in the Ph.D. Program will have an oral exam at the end of the first year of the program.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor and Pharmacology Director of Graduate Studies to determine their program of study.

All course additions and withdrawals (registration revisions) must be approved in the same manner.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and

- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Physician Assistant Studies, M.P.A.S.

Master of Physician Assistant Studies
Program Director: Rebecca Mueller
Campus Address/General Office: 260 Brodie - 727 McDermot Avenue
Telephone: 204-272-3094
Fax: 204-480-1372
Email Address: mpas@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/master-of-physician-assistant-studies (https://umanitoba.ca/medicine/medicine/master-of-physician-assistant-studies/)
Academic Staff: Please see the M.P.A.S. website (https://umanitoba.ca/medicine/department-physician-assistant-studies/faculty-staff/) for Academic staff information

Master of Physician Assistant Studies Program Information

The Master of Physician Assistant Studies (M.P.A.S.) degree is a nationally accredited coursework-based graduate program, designed to educate generalist medical providers who are eligible for the national certification exam and qualify for PA licensure in Manitoba.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

M.P.A.S. Admission Requirements

This program is open to Canadian Citizens or Permanent Residents of Canada who are graduates of four-year bachelor's degrees from recognized colleges and universities, with a minimum Grade Point Average of 3.0 in the most recent 60-credit hours of study (full time or part-time study). Note that a GPA of 3.5 or better is competitive.

Completion of the required courses, Human Anatomy, Human Physiology, and Biochemistry, from an accredited university or college, is required. Undergraduate level asset courses include Microbiology and Psychology. All courses require at least three credit hours each for consideration.

MPAS uses the Multiple-Mini Interview (MMI) Panel Interview and a Written Essay as part of the selection process for candidates. The program also requires Situational Judgement Testing (e.g., Canadian Professional Health Sciences CASPer test).

On enrolment, accepted students must be eligible for the Educational Register with the College of Physicians and Surgeons of Manitoba (http://cpsm.mb.ca/).

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the M.P.A.S. program of study (https://umanitoba.ca/explore/master-physician-assistant-studies-mpas/) page.

Degree Requirements

The MPAS is a two year program. The first year consists of 56 credit hours of coursework, delivered in three semesters from September - July as a combination of lecture, clinical skills training, and seminars. The second year includes 30 credit hours (48 weeks) of core clinical rotations. All courses are required major courses, and students must maintain full-time registration throughout the Program.

Expected Time to Graduate: 26 months inclusive of the National Certification Examination

Progression Chart

Course	Title	Hours
Year 1		
Academic		
PHAC 7230	Fundamental in Pharmacology for Health Care I	3
PAEP 7000	Physiology and Pathophysiology for Physician Assistants	3
PAEP 7010	Human Anatomy for Physician Assistants	3
PAEP 7030	Professional Studies of Physician Assistants	3
PAEP 7042	Biochemistry for Physician Assistants	1
PAEP 7045	Research and Clinical Practice for Physician Assistants	1
PAEP 7052	Patient Assessment for Physician Assistants I	2
PAEP 7084	Microbiology for Physician Assistants	1
Curriculum Integration		0
PHAC 7240	Fundamentals in Pharmacology for Health Care II	3
PAEP 7002	Physiology and Pathophysiology for Physician Assistants II	3
PAEP 7054	Patient Assessment for Physician Assistants II	2
PAEP 7090	Principles of Psychiatry for Physician Assistants	3
PAEP 7068	Adult Medicine for Physician Assistants 1	6
PAEP 7110	Emergency and Critical Care for Physician Assistants	3
Early Exposure		0
Curriculum Integration		0
PAEP 7046	Genetics for Physician Assistants	1
PAEP 7082	Diagnostic Imaging for Physician Assistants	1
PAEP 7050	Obstetrics and Gynecology for Physician Assistants	3
PAEP 7056	Patient Assessment for Physician Assistants III	2
PAEP 7100	Principles of Surgery for Physician Assistants	3
PAEP 7078	Adult Medicine for Physician Assistants II	6
PAEP 7048	Pediatrics for Physician Assistants	3
PAEP 7150	Year 1 Comprehensive Examination (Pass/Fail)	0
Procedures Lab		0

Early Exposure		0
Curriculum Integration		0
	Hours	**56**
Year 2		
Clinical Rotations		
PAEP 7202	Family Medicine for Physician Assistants	6
PAEP 7210	Clinical Internal Medicine for Physician Assistants	3
PAEP 7220	Clinical Surgery for Physician Assistants	3
PAEP 7240	Clinical Pediatrics for Physician Assistants	3
PAEP 7250	Clinical Psychiatry for Physician Assistants	3
PAEP 7260	Community Health for Physician Assistants	3
PAEP 7270	Clinical Emergency Medicine for Physician Assistants	3
PAEP 7280	Clinical Obstetrics and Gynecology for Physician Assistants	3
PAEP 7204	Clinical Elective for Physician Assistants I	1.5
PAEP 7206	Clinical Elective for Physician Assistants II	1.5
PAEP 7300	Comprehensive Assessment of Clinical Skills	0
PAEP 7350	PAEP Final Project	0
PAEP 7212	External Electives for Physician Assistant Students	0
	Hours	**30**
	Total Hours	**86**

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Physiology & Pathophysiology, M.Sc.

Physiology & Pathophysiology
Head: Dr. Peter Cattini
Grad Chair: Dr. Brent Fedirchuk
Campus Address/Administration Office: 432 Basic Medical Sciences Building
Telephone: 204-789-3696
Fax: 204-789-3934
Email Address: physiology@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-physiology-pathophysiology (https://umanitoba.ca/medicine/medicine/department-physiology-pathophysiology/)
Academic Staff: Please refer to the Physiology & Pathophysiology website (https://umanitoba.ca/medicine/medicine/department-physiology-pathophysiology/#faculty-and-staff) for current staff listing.

Physiology & Pathophysiology Program Information

The department offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for Master's students are found in the Master's Degrees General Regulations (p. 100) section of the Guide.

Physiology & Pathophysiology M.Sc. Admission Requirements

Applicants must possess a four-year Bachelor's degree (or equivalent); or, three-year Bachelor's degree plus successful completion of Post Baccalaureate Diploma in Medical Physiology & Pathophysiology from the University of Manitoba.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Physiology & Pathophysiology M.Sc. program of study (https://umanitoba.ca/explore/physiology-pathophysiology-msc/) page.

Degree Requirements

A minimum of 9 credit hours or 1.5 full-credit equivalents (FCE) in 7000 level courses from any suitable discipline is mandatory for completion of the M.Sc. program; a 0.5 FCE corresponds to a course that runs for a full term. In most cases, a student will be required to complete:

Course	Title	Hours
PHGY 7252	Respiratory Physiology & Pathophysiology [1]	1.5
PHGY 7254	Cardiovascular Physiology & Pathophysiology [1]	1.5
PHGY 7256	Endocrine Physiology & Pathophysiology [1]	1.5
PHGY 7258	Neurophysiology & Pathophysiology [1]	1.5
IMED 7410	Biomedical Trainee Skills	3

[1] 4 x 1.5 credit hours or 1.0 FCE total.

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
PHGY 7252	Respiratory Physiology & Pathophysiology	1.5
PHGY 7254	Cardiovascular Physiology & Pathophysiology	1.5
PHGY 7256	Endocrine Physiology & Pathophysiology	1.5
PHGY 7258	Neurophysiology & Pathophysiology	1.5
IMED 7410	Biomedical Trainee Skills	3
	Hours	**9**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**9**

Students may be required to take other courses.

Registration Information

Students should familiarize themselves with the Faculty of Graduate Studies 'GRAD' courses applicable to their program (p. 123). If you have questions about which GRAD course(s) to register in, please consult your home department/unit.

Prior to registration, all new and returning students must meet with their advisor to determine their program of study. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Please note that registration for all students will be completed by the graduate program assistant for the department once the worksheet provided each term has been completed and signed by the student's advisor.

Not all courses are offered every year and some courses will be held only with a minimum enrolment.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

Supplementary Regulations

Individual units may require specific requirements above and beyond those of the Faculty of Graduate Studies, and students should consult unit supplementary regulations (https://umanitoba.ca/graduate-studies/supplementary-regulations/) for these specific regulations.

Bona Fide Academic Requirements (BFAR)

Bona Fide Academic Requirements (BFAR) (p. 95) represent the core academic requirements a graduate student must acquire in order to gain, and demonstrate acquisition of, essential knowledge and skills.

All students must successfully complete:

- GRAD 7300 prior to applying to any ethics boards which are appropriate to the student's research or within the student's first year, whichever comes first; and
- GRAD 7500 within the first term of registration;

unless these courses have been completed previously, as per Mandatory Academic Integrity Course (p. 96) and Mandatory Research Integrity Online Course (p. 96).

Students must also meet additional BFAR requirements (https://umanitoba.ca/graduate-studies/student-experience/core-academic-requirements/#additional-requirements-by-program) that may be specified for their program.

General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Note: Physiology & Pathophysiology requires a higher minimum course grade. Students are required to maintain a **B (3.0)** in all course work.

Physiology & Pathophysiology, Ph.D.

Physiology & Pathophysiology
Head: Dr. Peter Cattini
Grad Chair: Dr. Brent Fedirchuk
Campus Address/General Office: 432 Basic Medical Sciences Building
Telephone: 204-789-3696
Fax: 204-789-3934
Email Address: physiology@umanitoba.ca
Website: umanitoba.ca/medicine/medicine/department-physiology-pathophysiology (https://umanitoba.ca/medicine/medicine/department-physiology-pathophysiology/)
Academic Staff: Please refer to the Physiology & Pathophysiology website (https://umanitoba.ca/medicine/medicine/department-physiology-pathophysiology/#faculty-and-staff) for current staff listing.

Physiology & Pathophysiology Program Information

The department offers graduate programs leading to the Master of Science and Doctor of Philosophy degrees.

Admission Information

Admission to the Faculty of Graduate Studies

Application and Admission Procedures are found in the Academic Guide (p. 88).

Admission requirements for doctoral students are found in the Doctor of Philosophy General Regulations (p. 106) section of the Guide.

Physiology & Pathophysiology Ph.D. Admission Requirements

Admission requirements are those of the Faculty of Graduate Studies.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Physiology & Pathophysiology Ph.D. program of study (https://umanitoba.ca/explore/physiology-pathophysiology-phd/) page.

Degree Requirements

Students who have obtained a Master's degree (including 9 or more credit hours of coursework at the 7000 level) will be required to take a minimum of an additional 9 credit hours to meet the requirements of the Ph.D. For students transferring from the M.Sc. program into the Ph.D., a minimum of 6 credit hours are required to meet the requirements of the Ph.D. beyond the 9 credit hours obtained under the M.Sc. program.

Additional courses that are deemed appropriate by the Student's Advisory Committee may be taken with the approval of the Department of Physiology & Pathophysiology Graduate Program Committee, up to a maximum of 24 credit hours (4 FCE). Note: a 0.5 FCE corresponds to a course that runs for a full term.

Expected Time to Graduate: 4 years

Progression Chart

Course	Title	Hours
Year 1		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
Coursework [1]		9
	Hours	**9**
Years 2-5		
GRAD 8000	Doctoral Thesis	0
	Hours	**0**
	Total Hours	**9**

[1] Student & Advisor decide on courses.

Registration Information

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Prior to registration, all new and returning students must meet with their advisor to determine their program of study. All course additions and withdrawals (registration revisions) must be approved in the same manner.

Not all courses are offered every year and some courses will be held only with a minimum enrolment.

Regulations

Students must meet the requirements as outlined in both Supplementary Regulation and BFAR documents as approved by Senate.

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General Regulations

All students must:

- maintain a minimum degree grade point average of 3.0 with no grade below C+,
- meet the minimum and not exceed the maximum course requirements, and
- meet the minimum and not exceed the maximum time requirements (in terms of time in program and lapse or expiration of credit of courses).

Note: Physiology & Pathophysiology requires a higher minimum course grade. Students are required to maintain a **B (3.0)** in all course work.

Surgery, M.Sc.

Surgery
Head: Dr. Edward Buchel
Grad Chair: Krista Hardy
Campus Address/General Office: 3rd Floor- SMD Building, 825 Sherbrook Street
Telephone: 204-787-1219
Fax: 204-940-8970
Email Address: surgery_graduate@umanitoba.ca (surgery_graduate@umanitoba.ca)

Website: umanitoba.ca/medicine/department-surgery (https://umanitoba.ca/medicine/department-surgery/)
Academic Staff: Please refer to the Surgery website (https://umanitoba.ca/medicine/department-surgery/faculty-staff/) for current staff listing.

Surgery Program Information

The Master of Science program is open to residents in Surgery at the University of Manitoba who are currently enrolled in a Royal College of Physicians and Surgeons of Canada (RCPSC) speciality training program through the Max Rady College of Medicine in the Rady Faculty of Health Sciences.

The RCPSC program is a postgraduate clinical speciality certification program and residents earn the designation of M.Sc. as an additional degree to their certification. Through the Thesis Stream, the Surgery program provides surgical residents a year free of clinical[1] duties to complete the required course hours.

[1] It is strongly advised that residents discuss with their Program Director the expectations of their responsibilities within their Program during the year of research.

Surgery M.Sc. Admission Requirements

This program is **only** open to holders of an M.D. degree who are currently enrolled in a postgraduate residency program in the Max Rady College of Medicine at the University of Manitoba. As residents incorporate this program as part of their residency training, concurrent curriculum registration is required.

Applicants must complete the *Application Guide & Supplemental Form* available online through the MSc website. An appointment must be made through the Department of Surgery Research & Graduate Office with the Graduate Chair to review the applicant's research proposal and all accompanying documentation for approval before admissions to the Faculty of Graduate Studies can be approved.

Application Information

Students should complete and submit their online application with supporting documentation by the date indicated on the Surgery M.Sc. program of study (https://umanitoba.ca/explore/surgery-msc/) page.

Degree Requirements

Students must complete:

- The minimum course requirements of 12 credit hours at the 7000 level;
- Twelve months' work of research, under the direct supervision of an approved Thesis Advisor;
- Submit a major thesis on the research project;
- Defend their thesis to a Committee of Examiners, demonstrating adequate knowledge of the subject involved

Expected Time to Graduate: 2 years

Progression Chart

Course	Title	Hours
Year 1		
Required Courses		
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
SURG 7012	Surgery- Major Course in Surgical Problems (Part A & Part B)	3
SURG 7030	Advanced Surgery	3
Elective Courses		
Select 6 credit hours of the following:		6
SURG 7022	Surgery- Specialty Rounds in Surgical Problems (Part A & Part B)	
CHSC 7810	Biostatistics for the Health and Human Sciences	
CHSC 7820	Biostatistics for Community Health Sciences	
CHSC 7830	Advanced Biostatistics for Community Health Sciences	
	Hours	**12**
Year 2		
GRAD 7000	Master's Thesis	0
	Hours	**0**
	Total Hours	**12**

Notes:

- Within six months of the student's MSc program the student shall present their thesis proposal to their Advisory Committee.
- Surgery recommends one year full-time study and two years to complete and defend for graduation; preferred to be completed prior to the end of their final year of training (June 30).
- A decision to extend this time will be made by the Department of Surgery Graduate Chair on a case-by-case basis.

Registration Information

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All new or returning graduate students must contact the Department.

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Course Descriptions

A

B

C

D

E

F

G

H

I

K

L

Agribusiness and Agricultural Economics (ABIZ)

ABIZ 7110 Attributes of Market Organization 3 cr
Analysis of agricultural market structure, conduct and performance of processing industries.

ABIZ 7140 Resource Efficiency and Allocation in Agriculture 3 cr
Seminar on research issues in production economics related to technological change, risk and uncertainty, management and firm growth.

ABIZ 7230 Agricultural Market Regulation 3 cr
A review of economic theories of regulation and their application in agricultural marketing. Analysis of specific regulation in agricultural markets.

ABIZ 7240 Research in Agricultural Marketing 3 cr
Advanced economic theory and quantitative techniques relevant to agricultural marketing. Topics include model building, market demand and supply, market regulation, and review of literature on marketing research.

ABIZ 7260 Econometrics with Applications in Food, Agribusiness and Resources 3 cr
Econometrics as applied to food, agriculture, agribusiness, resources and related areas. Econometric applications in these areas may cover generalized least squares, instrumental variables, nonstationarity and other topics. Econometric software and data will be used Students will conduct a related applied econometric study.

ABIZ 7270 Research Methodology 3 cr
Critical discussion of scientific methodology and the scientific status of agricultural economics. Discussion of methodological issues as they relate to the research process in agricultural economics.

ABIZ 7300 Topics in Agricultural Economics 3 cr
Application of economic analysis to contemporary problems in agriculture.

ABIZ 7310 Agricultural Economic Development 3 cr
Theory and policy of agricultural development in underdeveloped countries: problems of stimulating growth in agriculture and evaluation of alternative approaches to economic development of agriculture.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

ABIZ 7330 Transportation Economics and Research 3 cr
Rate determination and cost analysis for different modes of transportation; transportation issues in Canadian agriculture; and research techniques in transportation problems. Prerequisite is consent of instructor.

ABIZ 7350 Regional Development 3 cr
Review policy, goals, theories, methods and applications relevant to analyzing Canadian and developing country rural development, regional economic growth and project evaluation.

ABIZ 7360 Current Issues in Policies Relating to Agriculture 3 cr
Seminar dealing with current issues in policies relating to agriculture.

ABIZ 7380 Agricultural Policy 3 cr
Bearing of economic theory on agricultural policy: relevance of allocative efficiency, distributive equity and other criteria, and economic evaluation of alternative policies.

ABIZ 7400 Forecasting and Simulation Models 3 cr
Application of simulation modelling to characterizing and predicting the behaviour of complex systems (ecological, engineering and economic). Foundations of simulation and statistical approaches to analysis are emphasized.

ABIZ 7410 Agricultural Finance 3 cr
Analysis of financial structure and goal criteria of agricultural firms, analysis of financial markets and institutions, evaluation and application of techniques in risk analysis, investment analysis, financial analysis, and growth and evaluation models.

ABIZ 7430 Advanced Theory of Resource Economics 3 cr
Economic theory of the development and management of natural resources. Application of capital theory, investment theory, the theory of externalities and decision-making theories to resource utilization and management. A strong background in microeconomics is required. Also offered as ECON 7430 by the Department of Economics.
Equiv To: ECON 7430

ABIZ 7460 Research Management 3 cr
Application of research management concepts in agriculture and the resource sectors. Research definitions and methodology; the macro environment in relation to research (social and grantor priorities, economic and institutional constraints, institution and project (micro) level (priorities, objectives, budgeting, time and personnel management, performance assessment): proposal and report writing; project evaluation.

ABIZ 7630 Theory of International Trade 3 cr
Theories of trade flow; trade and income distribution; economic growth and changes in trade flows; instruments of trade intervention; international labour and capital movements; and economic integration. Also offered as ECON 7630 by the Department of Economics.
Equiv To: ECON 7630

ABIZ 7940 Production Economics 3 cr
Development of static microeconomic theories of the firm, functional forms, aggregation issues, productivity analysis, risk and uncertainty, and an introduction to dynamics. The following are emphasized; a rigorous treatment of the models using duality; a critical understanding of the limitations and possibilities for generalizing the models; and relevance of the models for empirical research, especially in agriculture. Also offered as ECON 7940 by the Department of Economics.
Equiv To: ECON 7940

ABIZ 7950 Advanced Agricultural Demand Analysis 3 cr
Critical evaluation of economic theory as applied to agricultural demand. Topics include demand systems; equilibrium; product transformation over time, place and form; and price analysis. Also offered as ECON 7950 by the Department of Economics. Not to be held with ECON 7950 or the former ABIZ 7100 or the former ECON 7900.
Equiv To: ABIZ 7100, ECON 7900, ECON 7950

Accounting (ACC)

ACC 7010 Accounting Fundamentals 3 cr
This course covers the principles underlying accounting, with an emphasis on the interpretation of accounting information and its usefulness to stakeholders. Not to be held with ACC 6050.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MSCI 5110 Basic Quantitative Analysis for Management 1 AX (auxiliary) cr hrs.
Equiv To: ACC 6050

ACC 7020 Managerial Accounting 1.5 cr
Provide the information required within an organization to effectively plan and control business results and make sound decisions. Involves the generation, communication, interpretation and sharing of information to facilitate decision-making across functions. Not to be held with ACC 6060.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ACC 7010 Accounting Fundamentals.
Mutually Exclusive: ACC 6060

Animal Science (ANSC)

ANSC 7140 Animal Science Seminar 3 cr
Reports and discussions on current problems and investigational work with mammals and poultry. This course is graded pass/fail.

ANSC 7220 Genetic Principles of Animal Improvement 3 cr
Designed for the development of a framework of theory for the study of the genetics of populations. Changing gene frequency. Genetic and environmental subdivision of the phenotypic variance. Principles of selection.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ANSC 3500 or equivalent.

ANSC 7360 Advanced Reproductive Physiology, Male 3 cr
A lecture-seminar course on sexual function and testicular physiology in males of livestock species; environmental factors influencing reproductive efficiency: recent developments in semen preservation and artificial insemination.

ANSC 7370 Advanced Reproductive Physiology, Female 3 cr
A lecture-seminar on current topics related to female reproduction in the livestock species.

ANSC 7380 Endocrine Control of Animal Metabolism 3 cr
A lecture-seminar course on current topics concerning the control of physiological processes of -importance in domestic animal species.

ANSC 7390 Advanced Animal Science Seminar 3 cr
Ph.D. Candidates are expected to complete a grant application form, review and critique current literature, and present a seminar on current research topics. This course is graded pass/fail.

ANSC 7400 Quantitative Genetics in Animal Science 3 cr
A study of advanced techniques used in animal breeding research, their theoretical basis, analysis and interpretation. Case studies in the student's area of interest will be examined. Prerequisite ANSC 7220 or its equivalent.

ANSC 7440 Protein Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the fields of protein nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7440 by the Department of Human Nutritional Sciences.
Equiv To: HNSC 7440

ANSC 7450 Energy and Carbohydrate Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of energy/carbohydrate nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7450 by the Department of Human Nutritional Sciences.

ANSC 7460 Lipid Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of lipid nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7460 by the Department of Human Nutritional Sciences.
Equiv To: HNSC 7460

ANSC 7470 Vitamin Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of vitamin nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7470 by the Department of Human Nutritional Sciences.
Equiv To: HNSC 7470

ANSC 7480 Mineral and Trace Element Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of mineral nutrition and metabolism, pertinent to mammalian physiology Also offered as HNSC 7480 by the Department of Human Nutritional Sciences.
Equiv To: HNSC 7480

ANSC 7490 Phytochemical Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of phytochemical nutrition and metabolism, pertinent to mammalian physiology. Also offered as HNSC 7490 by the Department of Human Nutritional Sciences.
Equiv To: HNSC 7490

ANSC 7500 Methodology in Agricultural and Food Sciences 3 cr
The application of experimental techniques and procedures to agricultural and food sciences research. Recording, processing, interpretation, and critical appraisal of experimental data.

ANSC 7510 Special Topics in Animal Nutrition 3 cr
Students will be required to investigate and report on a nutrition problem in a species other than that of their thesis research. Projects may be avian, bovine, ovine, swine or laboratory animal species.

ANSC 7520 Special Topics in Animal Improvement 3 cr
Assigned readings, papers and discussions specific problems in animal genetics. Analysis of original data may be required.

ANSC 7530 Special Topics in Animal Physiology 3 cr
Students will investigate a minor research problem in an area of physiology other than that in which the major is being taken. Problems areas may include: digestion, environment, renal function or reproduction.

ANSC 7540 Advanced Applied Animal Nutrition 3 cr
An advanced study of the theoretical and applied aspects of monogastric and ruminant nutrition. A laboratory component will provide training in current techniques in feed analyses and computer modeling.

ANSC 7550 Special Topics in Animal Behaviour and Welfare 3 cr
Assigned readings, papers and discussions on specific issues in animal behaviour. A short behavioural experiment may be required.

ANSC 7560 Mathematical Modeling of Agricultural Systems 3 cr
Lectures and computer based laboratory exercises will be used to discuss various aspects of model development focusing on mechanistic (compartmental analysis), growth functions and an introduction to linear programming. Construction of a simulation model may be required. Not to be held with ANSC 4240 Mathematical Modeling of Biological Systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MATH 1500 or MATH 1520

Anthropology (ANTH)

ANTH 7000 Professional Development in Anthropology 0 cr
The course is designed for graduate students to develop the professional skills needed to pursue careers in anthropological research, teaching, and practice. The course prepares students for academic and applied careers through regular group meetings, participation in workshops, and departmental community outreach initiatives. This course is graded Pass/Fail.

ANTH 7040 Seminar in Ethnography of Power Systems 3 cr
Comparative study of a particular theme or problem in political anthropology.

ANTH 7050 Seminar in the Anthropology of Religion 3 cr
An intensive analysis of religion as a cultural subsystem, dealing comparatively with ideologies, rituals, and ceremonies and the various anthropological theories put forward to explain religious behaviour.

ANTH 7070 Seminar in the Anthropology of Illness 3 cr
Selected topics in the study of cultural factors involved in health/illness, with emphasis upon a particular cultural system. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ANTH 7080 Museums, Memory, and Witnessing 3 cr
Discussing key issues in museology such as collections and collecting, conservation, representation, repatriation, and restitution, this course will explore the museum as witness. Particularly examining how museums are entangled with violence, we will attend to memory as our approach for delving into both museums' histories and their imagined futures. The course will bring scholarship, contemporary art, exhibitions, activism, and policy into creative and critical conversation on the state and idea of museums today. Not open to students who have completed ANTH 4080 or equivalent. Permission of Instructor.

ANTH 7100 Anthropology of Human Rights 3 cr
This seminar examines diverse global conceptualizations and practice of human rights and social justice with particular attention to instances where human rights are emergent, and where they are contested or are subjects of conflict. May not be held with ANTH 7900 under the same topic subtitle.
Mutually Exclusive: ANTH 7900

ANTH 7102 Environmental Conflict, Rights and Justice 3 cr
This course will focus on anthropological studies and perspectives related to environmental issues. Students will gain familiarity with current academic debates and new theoretical approaches to nature, environmental rights, and environmental justice issues. May not be held with ANTH 7900 under the same topic subtitle.
Mutually Exclusive: ANTH 7900

ANTH 7130 Cultural Ecology 3 cr
An examination of the systematic nature of culture and its interrelationships with natural environmental factors.

ANTH 7140 Ethnographic Research Methods 3 cr
Approaches and techniques in field research.

ANTH 7350 Prehistoric Human Ecology 3 cr
Data and techniques involved in the reconstruction of past environments, with special emphasis on the influences of environment on prehistoric cultural development.

ANTH 7380 Archaeological Laboratory Techniques 3 cr
Laboratory techniques for analysis and presentation of archaeological data.

ANTH 7400 Seminar in the Archaeology of a Selected Area 3 cr
An intensive survey of the archaeology of a major region or culture area of the world. Content will vary according to the interests of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ANTH 7410 Seminar in Selected Topics in Archaeology 3 cr
The seminars will consist of an intensive examination of major methodological, analytical and interpretive issues in current archaeological research. Content will vary according to the interests of the instructor. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ANTH 7430 Archaeological Interpretive Methods 3 cr
This course is an intensive seminar on major methodological issues in archaeological analysis and interpretation.

ANTH 7440 Archaeological Theory 3 cr
Archaeological theory as seen from historical and contemporary perspectives.

ANTH 7450 Cultural Resource Management 3 cr
An intensive examination of archaeological cultural resource management. Emphasis will be placed on current Canadian CRM issues and on practical applications of concepts and methods.

ANTH 7460 Advanced Faunal Analysis in Archaeology 3 cr
The course will cover the major theoretical, methodological, and practical issues in the analysis of archaeological faunal remains. Topics are addressed through lectures, demonstrations, and laboratory exercises.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ANTH 3990 or written consent of instructor.

ANTH 7470 Scientific Methods and Applications in Archaeology and Biological Anthropology 3 cr
In this course, a range of scientific methods that can be applied to answer questions in archaeology and biological anthropology will be considered. These include microscopy, 3-D and virtual technologies ancient DNA, and elemental analyses. Students will learn how many of the core techniques are transferable across fields and will learn the strengths and limitations of the methods. Not open to students who have completed ANTH 4470 or equivalent. Permission of Instructor.

ANTH 7630 History of Anthropological Theory 3 cr
A broad overview of the history of anthropological theory and method from the 18th century to World War II. Focus on British and American developments in the context of the rise of industrialization and imperialism.

ANTH 7640 Contemporary Anthropological Theory 3 cr
Investigation, comparison and evaluation of contemporary approaches to culture theory in the areas of symbolism, social organization and ecology.

ANTH 7650 Applied Anthropology 3 cr
Investigation of major case studies, research methodologies, intervention strategies, and substantive areas of application in applied anthropology. Topical emphases such as economic development, health care delivery, resettlement schemes, will reflect the interests of the instructor.

ANTH 7720 Seminar in Human Adaptability 3 cr
An intensive study of human population biology in diverse environments inhabited by human populations. Emphasis on selected examples of cultural adaptability as a specifically human mechanism for dissipating stress on the biological system.

ANTH 7790 Advanced Topics in Human Skeletal Biology 3 cr
Analysis of metric and nonmetric morphological skeletal variation in human populations, with emphasis on the cultural and physical environment. Exemplary problems are drawn from the literature as well as from current research.

ANTH 7830 Social Organization 3 cr
Selected theories of social organization in cross cultural perspective. Subject matter may include kinship, age grading, territorial groupings, social stratification or ethnicity.

ANTH 7900 Problems in Ethnological Research 3 cr
Problems in ethnological research. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ANTH 7100, ANTH 7102

ANTH 7930 Special Problems in Human Biology 3 cr
Special problems in Human Biology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ANTH 7940 Graduate Reading and Research 1 3 cr
Reading and research. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ANTH 7950 Graduate Reading and Research 2 3 cr
Reading and research. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

Applied Health Sciences (AHS)

AHS 7000 Research and Practice in Applied Health Sciences 3 cr
The objective is to promote in students advanced knowledge, skills, and abilities needed to evaluate and conduct multidisciplinary, applied health research. This course is theoretical in nature and will require a high level of independence and participation by students.

AHS 7002 Seminar I Applied Health Sciences 0 cr
A monthly interdisciplinary seminar on current issues in applied health sciences, involving presentation by students, faculty, and invited speakers from inside and outside the University of Manitoba. Attendance and participation are required for AHS students during the first year of their doctoral program.

AHS 7004 Seminar II Applied Health Sciences 0 cr
A monthly interdisciplinary seminar on current issues in applied health sciences, involving presentation by students, faculty, and invited speakers from inside and outside the University of Manitoba. Attendance and participation are required for AHS students during the second year of their doctoral program.

AHS 7010 Introductory Research Project in Applied Health Sciences 6 cr
Students will conduct a research project under the direction of their advisor. To include all research phases: identification of question, literature review, proposal writing, conducting research, analyzing data and reporting results. Topics, paradigms and methods will vary by student. Intended for students who do not possess a research-based Master's degree. Course graded pass/fail.

Architecture (ARCH)

ARCH 6450 Inquiry by Design 3 cr
(Formerly 050.645) An exploration of design/research, to contrasting design and research via dialectical and practical inquiry. Research design and research methods instruction, in support of applied research to critique design theory and to build new design knowledge.

ARCH 7000 Advanced Technology Topics I 1.5 cr
One five-week seminar and/or project-based topics offering in-depth study of advanced building systems, technology, and methods. Options are grounded in faculty research and build upon foundation technology courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

ARCH 7010 Advanced Technology Topics 2 1.5 cr
One five-week seminar and/or project-based topics offering in-depth study of advanced building systems, technology, and methods. Options are grounded in faculty research and build upon foundation technology courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

ARCH 7020 Research Topics: History and Theory 1 1.5 cr
One five-week lecture, seminar and/or project-based topics offering an in-depth study of an historical and/or theoretical subject. Options are grounded in faculty research and build upon foundation history/theory courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

ARCH 7030 Research Topics: History and Theory 2 1.5 cr
One five-week lecture, seminar and/or project-based topics offering an in-depth study of an historical and/or theorectical subject. Options are grounded in faculty research and build upon foundation history/theory courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/or winter terms.

ARCH 7040 Professional Practice 3 cr
Is concerned with the duties and responsibilities of an architectural practice; its divisions, office organization and administration, in Manitoba and Canada. The lectures relate in scope and standard to current models of practice and their requirements, including issues of building economics and construction cost control.

ARCH 7050 Arch Studio 5 and Comprehensive Program Report 9 cr
Develop design explorations and seek to clarify relations between architectural criteria and the urban/natural environments in national or international contexts. Conceptual, programmatic, material, technological, economic, and political principles and systems employed are to be evident in the Comp. Prog Report.

ARCH 7060 Arch Studio 6 9 cr
The previous term's investigations are further developed into a comprehensive architectural design proposal. The thorough integration of design and programming criteria, with building and environmental systems and assemblies are examined.

ARCH 7070 Design Research Studio 9 cr
This final design studio involves concerted research and design explorations of an individually defined subject of inquiry, within a selected studio thematic focus. These investigations are intended to prepare students for their final Design Thesis.

ARCH 7080 Technology Thesis Report 3 cr
Technology Thesis Report is an advanced project-based course done in conjunction with the Design Thesis project. The report is related to an individual student's design thesis topic, focusing on specific aspects of technology and applied tech. research. Advisor supervision and external engineering consultancy or agreed equivalent are required.

ARCH 7100 Advanced Technology Topics 3 cr
Seminar and/or project-based topics offering in-depth study of advanced building systems, technology, and methods. Options are grounded in faculty research and build upon foundation technology courses. Some topics may be deemed mandatory at the department's discretion. Topics may be taken in the fall and/ or winter terms. Different topics under the same course may be taken for credit.

ARCH 7120 Research Topics: History and Theory 3 cr
Lecture, seminar and/or project-based topics offering an in-depth study of an historical and/or theoretical subject. Options are grounded in faculty research and build upon foundation history/theory courses. Some topics may be deemed at the department's discretion. Topics may be taken in the fall and or winter terms. Different Topics under the same course number many be taken for credit.

ARCH 7350 Legal Aspects of Architectural Practice 3 cr
Discusses the importance of the knowledge of law as it relates to professional practice of architecture, including a discussion of the historical development of legal responsibilities of a practicing professional generally and of architects specifically. There is also discussion of trends in the development of professional responsibility and liability.

Architecture Interdisciplinary (ARCG)

ARCG 6102 Topics in Environmental Processes 3 cr
A detailed study of some special topics in architecture, city planning, landscape architecture or interior design.

ARCG 7070 Topics in Environment P & D 1 3 cr
A course designed for graduate students in the departments of Architecture, Landscape Architecture, and City Planning to pursue interdepartmental studies in environmental processes and design (Architecture, Landscape Architecture, and City Planning).

ARCG 7080 TPS ENV P&D 2 3 cr
A course designed for graduate students in the departments of Architecture, Landscape Architecture, and City Planning to pursue interdepartmental studies in environmental processes and design (Architecture, Landscape Architecture, and City Planning).

ARCG 7090 LEED Core Concepts and Strategies 3 cr
This course provides a comprehensive overview of techniques, approaches, materials and technologies used in creating more sustainable buildings and communities in Canada. It provides an introduction to the LEED Rating System and is formulated as a preparatory course for persons interested in becoming a LEED Green Associate in Canada.

ARCG 7102 Studio Topics in Environmental Processes 6 cr
A detailed studio study of some special topics in architecture, city planning, landscape architecture or interior design.

ARCG 7150 Cooperative Education/ Integrated Work Term 1 0 cr
Work assignment in practice, business, industry, or government. Requires acceptance into the Faculty of Architecture Co-op/I graduate stream and submission of a written report covering the work completed for each four-month professional assignment. Course evaluated on a pass/fail basis.

ARCG 7202 Studio Topics in Environmental Process and Design 9 cr
A detailed studio study of special topics in architecture, city planning, landscape architecture or interior design to pursue interdepartmental studies in environmental design processes.

ARCG 7250 Cooperative Education/Integrated Work Term 2 0 cr
Work assignment in practice, business, industry, or government. Requires acceptance into the Faculty of Architecture Co-op/I graduate stream and submission of a written report covering the work completed for each four-month professional assignment.Course evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ARCG 7150.

ARCG 7350 Cooperative Education/Integrated Work Term 3 0 cr
Work assignment in practice, business, industry, or government. Requires acceptance into the Faculty of Architecture Co-op/I graduate stream and submission of a written report covering the work completed for each four-month professional assignment. Course evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ARCG 7250.

Astronomy (ASTR)

ASTR 7020 Cosmology and Black Holes 3 cr
Topics include static solutions of Einstein's equations, gravitational waves, static models for stars *(white dwarfs, neutron stars), dynamic models for stars (Birkhoff theorem, black holes), and cosmology (Robertson-Walker metric, Friedmann equations). Further topics discussed in the course are cosmic inflation, dark matter and energy, as well as large-scale structure of the universe. Students may not hold credit for both ASTR 4020 and ASTR 7020.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7010.
Mutually Exclusive: ASTR 4020, PHYS 4020

ASTR 7100 High-Energy Astrophysics 3 cr
This course provides an introduction to the growing field of high-energy radiation processes and astrophysical sources. Processes include Bremsstrahlung, inverse Compton scattering, pion decay, and particle acceleration. Sources include compact objects, supernovae and their remnants, gamma-ray bursts, clusters of galaxies. Students may not hold credit for both ASTR 4100 and ASTR 7100.
Mutually Exclusive: ASTR 4100

ASTR 7200 Radio Astronomy 3 cr
This course provides an introduction to observational radio astronomy and processes in radio astrophysics. Topics include radiative transfer; blackbody radiation; radio telescopes, receivers, and interferometers; thermal (e.g., HII regions) and non-thermal (e.g., radio galaxies) continuum sources; pulsars and spectral-line sources. Students may not hold credit for both ASTR 4200 and ASTR 7200.
Mutually Exclusive: ASTR 4200

ASTR 7400 Magnetohydrodynamics, Astrophysical Plasmas, and the Interstellar Medium 3 cr
This course develops a theoretical understanding of the interstellar magnetic fields for a diverse range of astrophysical objects, processes, and phenomena. Furthermore, the theoretical aspects of magnetohydrodynamics, and foundations for the physics of cosmic ray diffusion and acceleration, are also discussed. Students may not hold credit for both ASTR 4400 and ASTR 7400.
Mutually Exclusive: ASTR 4400

Biochem. and Medical Genetics (BGEN)

BGEN 7000 Research Seminar M.Sc. 1 cr
Consists of presentations of the student's current research. For Masters students only.

BGEN 7020 Proteins 3 cr
Three hours per week, one term. Purification, bioinformatics, characterization, expression, structure, folding and engineering of proteins.

BGEN 7040 Seminars in Human Genetics 3 cr
Current research in human genetics will be explored in the context of the evolving genetic counselling profession. Term paper, reflections and presentations.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: Enrollment in the M.Sc. Genetic Counselling Program or consent of instructor.

BGEN 7070 Special Topics in Human Genetics 3 cr
An assignment, tutorial and discussions course taken only through consultation with the head of the department. The topics will vary depending upon students' needs and interests, and may include specialized topics not available in regular course offerings.

BGEN 7090 Principles and Practice of Human Genetics 3 cr
Lectures, tutorials and assignments designed to review major topics in human genetics and give practical experience in the analysis and interpretation of human genetics data and critical review of published work.

BGEN 7120 Laboratory Methods in Human and Medical Genetics 3 cr
A seminar and assignment course covering an outline of the methods currently in use in human and medical genetic diagnostic and research laboratories. The principles of cell culture, cytogenetic, molecular and biochemical genetic techniques that are used in the diagnosis of human genetic disease and the study of human variation will be reviewed. Students will undertake a practical assignment and write a report.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BGEN 7130 Genetic Epidemiology of Human Populations 3 cr
Lectures, tutorials, and assignments on key concepts, principles, and their applications in mapping the genetic loci/variants for monogenic and complex human diseases/traits.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: BGEN 7090 or consent of instructor.

BGEN 7142 Clinical Genetics 1 3 cr
This course lays the groundwork for the development of genetic counselling clinical skills. Concepts include pedigree development and analysis, history taking, and risk evaluation as it relates to the genetic counselling practice. Overviews of human development, prenatal genetics, cancer genetics, carrier screening and hemoglobinopathies are provided.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Enrollment in the M.Sc. Genetic Counselling Program or consent of instructor.

BGEN 7144 Clinical Genetics 2 3 cr
This course builds on the genetic counselling clinical skills developed in BGEN 7142 course. The genetic counselling approach to rare and common genetic/metabolic conditions in the adult and pediatric populations is discussed. The roles of the genetic counsellor, clinical geneticist, other medical specialist and allied health in an interdisciplinary approach to patient care is explored.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: BGEN 7142, enrollment in the M.Sc. Genetic Counselling Program or consent of instructor.

BGEN 7160 Theory and Practice of Genetic Counselling 3 cr
Advanced theoretical and practical aspects of genetic counselling. Ethics, grief, and culture will be explored in the context of genetic counselling practice. Active participation component includes role plays/practical case scenarios.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Enrollment in the M.Sc. Genetic Counselling Program or consent of instructor.

BGEN 7180 Clinical and Molecular Cytogenetics 3 cr
Cytogenetic methodology; chromosome architecture; karyotype interpretation; indications for referral; chromosome syndromes and anomalies; prenatal diagnosis; chromosomal basis of oncogenesis; flow cytometry; immunogenetics; fluorescent in situ hybridization; the application of molecular technology to chromosome analysis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BGEN 7200 Topics in Biochemistry 1 3 cr
Advanced study and reading on two topics chosen by the course director in consultation with the student's supervisor. Topics include but are not limited to Neurochemistry, Lipids, Carbohydrates, Biomembranes, Inborn Errors, Cystoskeleton Proteins.

BGEN 7210 Topics in Biochemistry 2 3 cr
Advanced study and reading on two topics chosen by the course director in consultation with the student's supervisor. Topics include but are not limited to Neurochemistry, Lipids, Carbohydrates, Biomembranes, Inborn Errors, Cystoskeleton Proteins.

BGEN 7250 Gene Expression and Epigenetics 3 cr
Three hours per week, one term. Chromatin structure. Epigenetic regulation of transcription. Gene expression regulation. Bioinformatics.

BGEN 7260 Cellular and Molecular Biochemistry 3 cr
Three hours per week, one term. Recent research advances on the study of cellular components, assembly and organization of plasma membrane components, cell signaling, and cell cycle.

BGEN 7270 Introduction to Genetic Counselling Clinic Rotation 4 cr
This rotation will allow students to observe and participate in various genetic counselling settings. Participation will allow for skill development and practical application of genetic counselling fundamentals. Course graded Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: acceptance into the M.Sc. Genetic Counselling program.

BGEN 7280 Advanced Genetic Counselling Clinic Rotation 4 cr
This rotation will provide year two students full participation in various genetic counselling settings. Students will be able to use advance genetic counselling skills, building on their skill set from the previous introduction to genetic counselling clinical rotation course. This course is evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: BGEN 7270.

BGEN 7290 Visiting Genetic Counselling Student Elective 0 cr
A clinical rotation of varying length designed to provide a genetic counselling student not from the University of Manitoba with clinical education and training within a clinical site associated with the University of Manitoba MSc in Genetic Counselling Program (GCP). Course credit is assigned by the student's home institution.Course graded Pass/Fail.

BGEN 8000 Research Seminar Ph.D. 1 cr
Consists of presentations of the student's current research. For Ph.D. students only.

Biological Sciences (BIOL)

BIOL 7100 Core Skills in Biological Sciences Research 3 cr
Learning skills for a career in scientific research in Biological Sciences including: using the scientific method, applying for NSERC funding, maintaining a CV, abstract writing, ethics in research, research protocols and biosafety and biohazards, statistical designs and their assumptions, literature searching, critical thinking, critiquing the scientific literature, making teaching and research presentations. Not to be held with Methodology of Research ANAT 7090.

BIOL 7140 Advanced Physiology 6 cr
An in-depth study of topics related to how changing internal and external environments influence life sustaining physiological processes. Topics include plant and animal stress, endocrine & electrophysiology, metabolism and molecular biology of solute transport.
Equiv To: ZOOL 7140

BIOL 7142 Advanced Physiology 3 cr
An in-depth study of topics selected from physiological research of the department including plant, animal, stress physiology, ecophysiology, electrophysiology, endocrine or neurophysiology and others. Topics will be focused on the research area of each student to acquire specialized knowledge in a particular topic.

BIOL 7202 Evolutionary Biology 3 cr
An in-depth study of topics selected from research interests within the department that may cover an evolutionary theme. This course will allow students to acquire or expand on specialized knowledge in a particular evolutionary topic through a series of readings or a combination of readings and lectures.

BIOL 7220 Critical Thinking in Biological Sciences 3 cr
A core graduate level course within the Ph.D. program designed to stimulate discussion and thought in key areas applicable to the student's research discipline.

BIOL 7230 Advanced Topics in Zoology 6 cr
A seminar on current research topics in Zoology.
Equiv To: ZOOL 7230

BIOL 7240 Wetland Ecology 6 cr
A study of marsh, bog, and fen communities, with emphasis on their history, soil-plant relationships, and species distribution. Field work at the University Field Station (Delta Marsh) and nearby bog and fen sites will be an integral part of the course.
Equiv To: BOTN 7240

BIOL 7250 Advanced Evolution and Systematics 3 cr
This course will first consider theoretical and practical aspects of systematics, and then consider how systematic and population-level studies have illuminated our understanding of evolutionary processes.

BIOL 7302 Environmental Biology and Ecology 3 cr
An in-depth study of topics selected from environment and ecology interests of the department, including population ecology, fisheries biology, plant/animal interactions, animal behaviour, ecosystem dynamics and restoration. Topics will be chosen to acquire specialized knowledge in a particular topic.

BIOL 7352 Aquatic Biology 3 cr
An in-depth study of topics covering all aspects of aquatic biological interests in the department including wetland ecology, limnology, oceanography, toxicology, conservation, and others. Topics will focus on the research interests of students so they may acquire specialized knowledge in particular areas.

BIOL 7360 Problems in Biological Statistics 3 cr
The course discusses statistical problems and techniques which specifically apply to biological research. Laboratory exercises will be based primarily on examples from field research.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: STAT 3130 or the consent of the instructor.
Equiv To: ZOOL 7360

BIOL 7370 Special Topics in Algal Ecology 6 cr
Directed study and project(s) in selected aspects of the ecology of freshwater phytoplankton, periphyton and metaphyton.
Equiv To: BOTN 7370

BIOL 7440 Methods and Approaches to the Analysis of Biological Data Part 1 3 cr
Methods for handling biological data arising from field surveys; planning and undertaking biological studies. Theory of experimental design, vegetation sampling, multivariate analysis, techniques of remote sensing, spatial analysis and modeling.
Equiv To: BOTN 7440
Mutually Exclusive: BIOL 4312

BIOL 7450 Methods and Approaches to the Analysis of Biological Data Part 2 3 cr
Analysis of complex biological data sets arising from field surveys, vegetation sampling and remote sensing using techniques from Part 1.
Equiv To: BOTN 7450

BIOL 7502 Cell and Developmental Biology 3 cr
An advanced topics course which will be an in-depth study of current research topics in cellular and developmental biology. An undergraduate background in cell and developmental biology or related areas is required.

BIOL 7540 Methods for Analysing Biological Data 3 cr
A survey of methods and approaches for analyzing biological data containing many variables, suitable for graduate students. Offered in alternate years. Not to be held with BIOL 4312.
Equiv To: BIOL 4312, BIOL 4650, BOTN 7440

BIOL 7554 Molecular Biology of Eukaryotes (DNA) 3 cr
This is a lab intensive techniques course designed for 4th year undergraduate and graduate students interested in understanding the theory application of molecular methods specifically focusing on eukaryotic DNA. Students will learn essential and cutting-edge molecular techniques involved in gene-structure, amplification, transformation and sequencing.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: BIOL 2520 (Cell Biology) or equivalent.

BIOL 7556 Molecular Biology of Eukaryotes (RNA) 3 cr
This is a lab intensive techniques course designed for 4th year undergraduate and graduate students interested in understanding the theory and application of molecular methods specifically focusing on eukaryotic RNA. Students will learn essential and cutting-edge molecular techniques involved in identifying messenger RNA expression of a particular target protein in plant or animal tissue.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: BIOL 2520 (Cell Biology) or equivalent.

BIOL 7580 Topics in Plant Pathology 3 cr
Current and specialized aspects of plant pathology studied through lectures, seminars, prescribed readings and laboratory projects.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: BIOL 4250 or equivalent, or consent of department head.
Equiv To: BOTN 7380

BIOL 7590 Pathology of Trees and Shrubs 3 cr
Lectures, seminars and readings focusing on special problems relating to the pathology of woody plants. Emphasis on ornamental shrub, shade tree, and forest tree species of local importance.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: BIOL 4250 or equivalent, or consent of department head.
Equiv To: BOTN 7390

BIOL 7600 Topics in Biological Sciences 3 cr
A general topics course to reflect an in-depth study of current interest topics to extend or acquire specialized knowledge in a particular area of biological interest. A subtitle may be added to the current title to reflect specialized interests.

BIOL 7602 Directed Studies in Biological Sciences 3 cr
A course to provide a broad knowledge of different topics within Biological Sciences peripheral to the specific topic of the student's thesis and will not become the introductory chapter of the thesis. Students will complete assignments by themselves but will participate and be evaluated as a group.

BIOL 7880 Ecology Project Course 3 cr
This course provides experience in the organization and execution of team research into current ecological issues. Teams consist of a graduate student team leader, 3-6 undergraduates, and a faculty advisor. Each project team identifies a specific research question, creates a proposal for answering it, and presents their results in a public forum.
Equiv To: BOTN 7880, ZOOL 7880

Biomedical Engineering (BME)

BME 7000 Biomedical Engineering Seminar 0 cr
The goal of this course is to train students with research methods and scientific presentations as well as providing exposure to the top research achievements in Biomedical Engineering (BME). In this bi-weekly seminar course, both students and established researchers will present on BME research topics. Course graded pass/fail.

BME 7012 Foundation of Physiology 2 cr
The goal of this course is to introduce human physiology for engineering students with no background in physiology. The offers the foundation of function and regulation of the systems and major organs of the human body.

BME 7022 Biomedical Instrumentation 2 cr
The goal of this course is to introduce the basics of biomedical instrumentation to students with no background in engineering. The course offers basics of electrical circuits, design of instrumentation amplifiers using EMG as an example, signal digitization and electrical safety of medical devices.

BME 7024 Basics of Electromagnetic 2 cr
The goal of this course is to introduce the basics of electromagnetic principles to students with no background in engineering. It will offer lectures on electrostatics, electric fields in matter, magnetostatics, electrodynamics, and Poynting's theorem.

BME 7026 Basics of Biological Signal Analysis 2 cr
The goal of this course is to introduce the basics of biological signal analysis to students with no background in signal processing. The course offers classification of signals and systems, stochastic nature of biological signals, Fourier Transform of signals, and power spectral analysis.

BME 7028 Basics of Biomechanics 2 cr
The goal of this course is to introduce the basics of biomechanics to students with no background in engineering. The course offers basics of mechanical and anatomical analysis of human movement, principles of human motor performance and motor learning and applications on rehabilitation.

BME 7040 Biomedical Ethics 0 cr
The goal of this course is to introduce the ethical issues encountered in biomedical research. The course presents several actual examples and offers the fundamental ethical rules of any biomedical research. This course is graded on a pass/fail basis.

BME 8990 Current Research Topics in Biomedical Engineering 3 cr
A discussion of current topics in biomedical engineering. The latest in instrumentation, procedures and practices relevant both to clinical engineering and ongoing research are covered.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Consent of instructor.

Biosystems Engineering (BIOE)

BIOE 7040 Fluid Mechanics of Unsaturated Porous Solids 3 cr
Statics and dynamics of two immiscible fluid phases occupying the voids of porous solids. Concepts include capillary pressure, bubbling pressure, saturation, intrinsic and relative permeability, pore-size distribution indices.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7110 Grain Storage 3 cr
A synthesis of major aspects of the storage of grain including: abiotic and biotic characteristics of stored grain bulks, regional variables, grain pressure theories, methods of controlling deterioration, and health hazards.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7140 Advanced Irrigation and Drainage 3 cr
Selected advanced problems and new developments in irrigation and drainage. Interrelationships between irrigation and drainage and the environment.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7180 Bioprocessing 3 cr
This course allows students with a background in either biological sciences or engineering to gain an understanding of biochemical engineering processes. Topics include production of biofuels, bioplastics, biophamaceuticals, and processing technologies. This course is also offered in the Department of Microbiology as MBIO 7070. BIOE 7180 is not to be held with MBIO 7070.
Equiv To: MBIO 7180

BIOE 7200 Bulk Solids Storage and Handling 3 cr
Fundamental characteristics of bulk solids, bulk solids flow during storage and handling, loads in bulk solids storage and handling systems, mechanical, pneumatic and hydraulic conveying of bulk solids, safety in storage and handling of bulk solids.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7210 Numerical Modelling of Biosystems 3 cr
Applications of numerical methods to the solution of problems dealing with biological systems: structure analysis, mechanical behaviour of biological materials, moisture sorption and desorption, cooling and heating of biological materials, and flow through saturated and unsaturated porous media. Solution of transient and non-linear problems. Use of commercial finite element packages for problem solving.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7220 Advanced Machine Design Analysis for Biosystems 3 cr
Analysis of machines for use in biosystems with respect to design and functional performance, in-field traction, operator safety and comfort, and energy source, transmission and application. Engineering analyses will be used to study biosystems machinery problems of current and future interest.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7230 Advanced Topics on Light-Frame Buildings 3 cr
Structural and environmental design and analysis of light-frame buildings. Topics include: loads in light-frame buildings; frame design; construction management; environmental control in light-frame buildings; and structure-environment interactions.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7240 Special Problems in Biosystems Engineering 3 cr
Advanced work in a specialized field involving engineering applications to biological systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7250 Mechanical Behavior of Biological Materials 3 cr
Elastic and inelastic behavior of biological materials under applied load. Emphasis on unprocessed and semi-processed food products. Use of mechanical behavior properties in the design of handling, storage, processing and sensing systems for food products.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7260 Research Methods in Biosystems Engineering 3 cr
Introduction to quantitative research methods emphasizing reproducible research and analysis. Topics include statement of research objectives and hypotheses; moving through experimentation, measurements, and data acquisition; and ending with exploratory analysis, statistical analyses and estimation.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7270 Advanced Seminar in Biosystems Engineering 3 cr
A series of seminars to be given by Ph.D. candidates on research topics of current interest in Biosystems Engineering.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7280 Advanced Topics in Biosystems Engineering 3 cr
An opportunity to extend, update or acquire specialized knowledge in particular area of interest.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7290 Biosystems Engineering Seminar 1 3 cr
Oral and written presentation of engineering research is discussed. Students are expected to actively participate in weekly seminars and to present two seminars both orally and written.

BIOE 7300 Food Process Engineering 3 cr
Food engineering concepts are presented using quantitative relationships that define the process. Various advanced methods of heating and processing foods are discussed and their mathematical and physical relationships described. Descriptive information of typical equipment assists students in utilizing engineering principles in design.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

BIOE 7310 Materials Incorporation into Soil 3 cr
Types and characteristics of agricultural materials; solid and liquid waste (including manure) incorporation; crop residue incorporations, seed placement; chemical incorporation; methods and equipment; performance evaluation; measurement technique.

BIOE 7320 Membrane Processes for Water and Waste Treatment 3 cr
Principles of membrane filtration, classification, design and manufacture. Principle mechanisms of mass transport to the membrane surface and particle/solute rejection. Investigation of membrane bio-fouling and bio-film control strategies. Fundamentals of reverse osmosis, nano-, ultra-, and micro-filtration process design and operation. Practical applications of membranes in the area of water and wastewater treatment. Innovative and novel bio-reactor designs utilizing membrane filtration for environmental reclamation.

BIOE 7350 Bioresource Engineering and Sustainability 3 cr
Students will gain an understanding of overall sustainability of industrial activities, energy usage, and resource depletion. Course topics will include: environmental emissions (as it relates to air and water pollution, solid and hazardous wastes, noise and traffic impacts); life-cycle assessment and related techniques for evaluating sustainability; design improvements to enhance environmental performance of engineered systems; and methodologies for assessing social and economic impacts of new developments.

BIOE 7360 Biological Systems: Behaviour, Modelling and Simulation 3 cr
Applications of engineering principles and mathematical methods to model and simulate biological ecosystems. Course materials will analyze critical elements of a biological system and interactions among these elements, principles and techniques of modelling biological systems, the modeling process, estimation of model parameters, and model analysis and validation. Examples of existing models will be discussed and used to simulate various biological systems.

BIOE 7370 Engineering Properties of Fibres for Industrial Uses 3 cr
Students will gain an understanding of various engineering properties of fibre and textiles for industrial uses. Case studies are used to illustrate the failure of textiles in engineering applications. The course will emphasize how to engineer and evaluate a fibre for biomedical, geotechnical, or athletic applications.

BIOE 7380 Biomaterial Science and Engineering 3 cr
The course provides students with an overview of materials that are synthesized for, or have agricultural, environmental or biomedical applications, including their sources, physical/chemical/biological properties and applications. The course includes the synthesis/isolation/fabrication and characterization of biomaterials, and the structure-property relationship of those materials. Students will be exposed to concepts on several material characterization techniques at the morphological, chemical and biological level.

Canadian Studies St. Boniface (CDSB)

CDSB 7010 CDN PEUP TERR 6 cr
Equiv To: CDSB 7011

CDSB 7020 CDN ID MYTH IM 6 cr
Equiv To: CDSB 7021

CDSB 7030 PROB MET ET CDN 3 cr
Equiv To: CDSB 7031

CDSB 7040 TEXT CDN BASE 3 cr
Equiv To: CDSB 7041

CDSB 7051 Francophonies canadiennes et internationales 3 cr
Ce cours en linge explore l'émergence de la francophonie institutionnelle et le rôle du Canada dans ce processus. Il traite des enjeaux sociaux, culturels, économiques et politiques de la francophonie à l'échelle régionale, nationale et internationale ainsi que des défis contemporains de la francophonie dans le contexte de la mondialisation, des enjeux identitaires et socioéconomiques chez les francophones en situation minoritaire.

CDSB 7071 L'état canadien : mondialisation et flux migratoires 3 cr
Ce cours en ligne propose une approche interdisciplinaire pour étudier les enjeux multiples qui entourent le sujet des flux migratoires au Canada dans le contexte de la mondialisation de l'économie et des communications. Il s'agira également de saisir l'histoire des phénomènes migratoires en tenant compte des facteurs politiques, économiques et sociaux et d'explorer les effets de l'immigration sur les expressions culturelles (arts et littérature).

Chemistry (CHEM)

CHEM 7400 Topics in Biochemistry 3 cr
A lecture and seminar course dealing with selected topics of current interest in biochemistry and molecular biology.

CHEM 7410 Spectroscopy and Molecular Structure 3 cr
Applications of spectroscopic methods to chemical problems with emphasis on mass spectrometry and related techniques.

CHEM 7450 Topics in Organic Chemistry 3 cr
A discussion of current and general topics related to novel and interesting areas of organic chemistry appearing in the current literature.

CHEM 7460 Topics in Synthetic Organic Chemistry 3 cr
A course designed to acquaint students with specific methods of synthesis.

CHEM 7520 Topics in Physical Chemistry 3 cr
The topics will vary, depending on student needs and interests; they may include, but will not be limited to the following: electrochemistry, surface chemistry, electrochemical kinetics, or other specialized topics not available in regular course offerings.

CHEM 7550 Design of Organic Synthesis 3 cr
Conceptual methodology in the design of synthesis will be discussed with inclusion of computer-aided approaches. Examples from the current literature will be used to emphasize the conceptual aspects.

CHEM 7560 Organometallic Chemistry 3 cr
Recent advances in synthetic and structural organometallic chemistry.

CHEM 7580 Chemical Crystallography 3 cr
Theory and practice of crystal structure analysis with emphasis on single crystal x-ray diffractometry; structure-activity relationships in small organic and inorganic compounds; introduction to protein and nucleic acid crystal structure analysis.

CHEM 7600 Topics in Inorganic Chemistry 3 cr
Topics of current research interest in the area of inorganic chemistry including, but not limited to synthesis, structures, catalysis and reaction mechanisms.

CHEM 7700 Topics in Analytical Chemistry 3 cr
Topics of current research interest in analytical chemistry including, but not limited to, mass spectrometry of large molecules, separation techniques, analysis of metals, surface analytical techniques, analysis of environmental samples, analysis of 'real' samples, and sampling techniques.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHEM 4590 or permission of instructor.

CHEM 7800 Topics in Theoretical Chemistry 3 cr
Topics of current research interest in theoretical and computational chemistry from such areas as ab initio quantum chemistry, molecular simulations, nonlinear reaction dynamics, spectroscopy and statictical mechanics.

CHEM 7900 Seminar in Current Research Issues in Chemistry 3 cr
Student-led seminars covering areas of interest to the faculty and students in the graduate Chemistry program, and current research issues in the field of Chemistry (including biochemistry, spectroscopy, organic chemistry, physical chemistry, organic synthesis, organometallic chemistry, inorganic chemistry, analytical chemistry and theoretical chemistry).

City Planning (CITY)

CITY 6020 PL METH TECH 1 3 cr

CITY 7020 Planning Methods and Techniques II 3 cr
A survey of quantitative and qualitative methods and techniques used in planning analysis and decision making including sampling survey, case study, contingency and spatial analysis as well as phenomenological and simulation techniques and methodologies.

CITY 7030 Planning Theory 1 3 cr
The principal ideas and ideals influencing planning thought and practice, ranging from rational comprehensive planning to theories of societal guidance, ethics and the human-environment interface.

CITY 7050 City Planning Capstone 6 cr
This course prepares students to undertake a self-directed planning research project, under the supervision of a City Planning faculty member and a second reader. Students conduct original research and analysis to address a contemporary issue in planning practice. Limited to students enrolled in the second year of the Master of City Planning (M.C.P.) degree.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CITY 7410, CITY 7030, and CITY 7020.

CITY 7070 Housing and Urban Revitalization 3 cr
Housing and urban revitalization in the Canadian context. Housing demand and supply, structure of the housing market, Canadian housing policy, affordability and other selected housing issues; processes and strategies related to urban decline and revitalization.

CITY 7160 Land Development 3 cr
Application of theories and techniques of urban land development, formulation of industrial policies and financial and political implications of land development.

CITY 7200 Urban Analysis 3 cr
Theoretical framework for the dominant theories of urban structure, property and land-use relevant to city planning.

CITY 7270 Seminar in Regional Planning 3 cr
An exploration of eco-regional planning drawing on concepts of citi-states (or city-regions) and bioregionalism; including contemporary theme research, and a region-specific analysis to inform an understanding of regional planning's past, present and future.

CITY 7300 Urban Society 3 cr
An interdisciplinary seminar on social policy and social planning in the contemporary urban setting. National, provincial and local contexts shaping the provision of welfare and well-being. Demonstration of selected social planning techniques. Application to current issues.

CITY 7310 Law and Local Government 3 cr
Topics of common law, torts, real property, land use planning and control, expropriation, and local government, including some recent cases.

CITY 7340 Urban Development 3 cr
The mechanics of urban development and its socio-economic implications and underlying political forces. Practical field experience is involved in the form of an internship.

CITY 7350 Thesis/Practicum Preparation 0 cr
A preparatory course for students registered in thesis or practicum. Methods of constructing problems, formulating hypotheses, methods of investigation, sources of information, and appropriate form and content of thesis and/or practicum. This course is graded pass/fail.

CITY 7360 Development Process for Design Professions 3 cr
Introduction to the development process and method. Site selection and planning. Feasibility and case studies. The dynamics of development teams, including marketing strategies and management of completed projects. Joint public and private enterprises.

CITY 7370 Urban Design 3 cr
Theory and concepts of urban design from historical and contemporary perspectives. Urban design seen as (a) a multidisciplinary activity, (b) conscious three-dimensional design, and (c) process and public policy. Implementation and control techniques of urban design. Case studies.

CITY 7410 Planning Design 1 6 cr
Studio/workshop developing problem solving techniques and design skills in an area subject to environmental, social and economic change. Preparation of a planning report comprising of research and analysis, evaluation of feasible alternative strategies and designs, synthesis and recommendations for implementation. Case studies from planning journals and planning practice in cities and regions.

CITY 7420 Planning Design 2 6 cr
Studio/workshop building upon CITY 7410 as applied to an area of greater complexity, requiring the evaluation and integration of contributions from several planning-related disciplines. Selected projects emphasize both the multidisciplinary and interdisciplinary nature of planning, and in the resolutions of the problems posed. Case studies from planning journals and planning practice in cities and regions.

CITY 7430 Planning Design 3 (Urban Design) 6 cr
The application of urban design theories and techniques to a large scale urban area of complex land uses and community development issues. The studio is also open to advanced students in architecture, landscape architecture and interior design and develops a broad approach to multi-disciplinary problem solving design solutions.

CITY 7440 Planning Design 4 6 cr
Advanced planning design studio/workshop, experimental and innovative in approach and content, involving special techniques and skills. Studio may also be off-campus and/or focused on a special topic centred around a distinguished guest expert.

CITY 7450 Concepts in Sustainable Planning and Design 3 cr
Examination of the concepts and theories involved in the development of sustainability as a force in socio-economic and environmental decision-making. Explores the implications of sustainability for contemporary design and planning thought and practice.

CITY 7460 Urban Ecology and Environmental Management 3 cr
Theoretical frameworks and theories in urban ecology and environmental management as they apply to municipal institutional frameworks and the role of environmental planning in urban and regional government.

CITY 7470 Professional Planning Practice 3 cr
An examination of the professional practice and praxis of planning, presented in collaboration with the Manitoba Association of the Canadian Institute of Planners, emphasizing the practice aspects of planning processes, and the political, institutional and legal systems that direct and/or inform planning.

Civil Engineering (CIVL)

CIVL 7010 Modern Railway Engineering 3 cr
A course in aspects of the design, construction, and operation of modern railways, examining main lines, branch lines, and terminals.

CIVL 7040 Analysis and Design of Freight Transport Systems 3 cr
Overview of the structure and organization of Canada's freight transport system; measurement, analysis and forecasting of freight movements; transportation system performance; operating, service and cost characteristics of freight transport systems; design considerations for freight handling facilities; case studies in analysis and design of freight transport systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: CIVL 4840 or permission of the instructor for non-engineering students specializing in transport studies.

CIVL 7050 Transportation Engineering in Developing Regions 3 cr
Aspects of transportation in developing regions that differ significantly from those of conventional North American practice. Factors and assumptions in developing region context; analysis and design of surface transportation systems and components in developing regions; special aspects of professional practice; case studies from Third World and northern Canada.

CIVL 7060 Analysis and Design of Passenger Transport Systems 3 cr
Passenger travel forecasting principles and techniques; demand models; passenger transportation system performance; vehicle cycles; cost functions; congestion; evaluation; examination of case studies.

CIVL 7090 Water Resources Systems 3 cr
The application of operations research/systems analysis techniques to water resources and urban and environmental systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

CIVL 7100 Prestressed Concrete 3 cr
A study of the analysis and design of prestressed concrete structures; pre-tensioning; post-tensioning; importance of material properties; modern design specifications.

CIVL 7140 Structural Masonry 3 cr
Masonry materials, properties and behaviour. Plain and reinforced masonry, axial load, flexure, combined loading. Design methods, building code developments, building design.

CIVL 7190 Solid Mechanics 3 cr
Cartesian Tensors, analysis of stress and strain, constitutive relations, formulation and solution of problems in 2-D and 3-D elasticity, Hankel integral transforms, plasticity; yield surface and criteria, flow rule, plastic potential, hardening, viscoelasticity; creep, relaxation, basic viscoelastic models, stress-strain relations, correspondence principle.

CIVL 7200 Topics in Environmental Engineering 3 cr
Includes topics such as energy and the environment, solid waste management, and environmental problems in transport. Topics are studied through case histories of contemporary issues.

CIVL 7210 Solid Waste Composting and Disposal 3 cr
Advanced engineering principles related to resource recovery and solid waste disposal. Biological conversion technologies and the disposal of solid wastes are discussed in detail.

CIVL 7260 Behaviour of Reinforced Concrete Members 3 cr
Study of the actual behaviour and strength of reinforced concrete members; examination of recent significant publications, correlation to research with current design specifications and codes.

CIVL 7300 Use of Fibre-Reinforced Polymers (FRP) in Structural Design 3 cr
Fibre-reinforced polymers (FRP) constituents and properties; design of concrete structures internally reinforced with FRP, concrete members prestressed with FRP, externally bonded FRP liminates for strengthening and rehabilitation of structures; construction details and case studies of projects using FRP reinforcement.

CIVL 7340 Sustainability in Construction 3 cr
Introduction and overview of sustainable construction and green buildings, green building assessment tools; the green building process; green building design, construction and commissioning, the economics of green buildings and future directions in sustainable construction and green buildings.

CIVL 7350 Topics in Advanced Structural Engineering 3 cr
Lectures and seminars on selected advanced topics in structural engineering; current problems; implications on current research.

CIVL 7360 Landslides and Slope Failures: Identification, Causes, and Control 3 cr
Slope movement types and processes in soil and rock masses; recognition and identification: factors influencing stability; field investigation and instrumentation; strength properties and their measurement; stability analysis; assessment of hazard and risk analysis; stability in open pit mining; remedial measures including stabilization, protection, and warning.

CIVL 7370 Advanced Construction Management 3 cr
Strategic management of construction organizations; strategy systems and processes; health and safety management; human resources management; benchmarking; financing; budgeting; value management and financial performance; and quantitative decision-making for construction organizations.

CIVL 7400 Finite Element Method in Engineering Mechanics 3 cr
Review of flexibility and stiffness methods; concept of finite elements and energy formulations; various shape functions; solutions of planar and three-dimensional elasticity problems; beams, plates and shells; special problems, e.g., seepage, non-linear material.

CIVL 7430 Special Topics in Geotechnical Engineering 3 cr
A tutorial approach to the study of topics in soil, rock and ice engineering not covered in the formal coursework.

CIVL 7450 Soil Properties and Behaviour 3 cr
Testing methods for strength, compressibility and hydraulic conductivity of engineering soils; traditional models for soil characterization; introduction to hypoelastic and elastic plastic modelling; extension of models to account for strain-rate, temperature, and unsaturation; influence of soil chemistry; relationship between laboratory results and computational needs.

CIVL 7460 Geotechnical Design with Geosynthetics 3 cr
Properties and test methods of geosynthetics (i.e., geotextiles, geogrids, geomembranes, geonets and geocomposites); functions of geosynthetics (separation, reinforcement, filtration, drainage and containment); design of reinforced soil structures (retaining walls, slopes, embankments and unpaved roads); design of filtration and drainage works; design of lined waste containment facilities; case histories.

CIVL 7480 Soils Engineering 3 cr
Analysis and design for construction in engineering soils: review of soil strength and compressibility, site characterization, stability and settlements of shallow foundations, deep foundations, earth retaining structures, slope design and remediation, earth dams. Emphasis will be placed on published records comparing predictions with field performance.

CIVL 7610 Special Topics in Theoretical and Applied Mechanics 3 cr
Lectures and seminar on selected advanced topics in the field of mechanics; current problems and research.

CIVL 7650 Selected Topics in Water-Resources Development 3 cr
Lectures and seminars on selected advanced topics in water-resources engineering.

CIVL 7652 River Ice Engineering 3 cr
This course will provide students with an introduction to River Ice Engineering topics and principles. River ice processes such as freeze-up, ice growth, break-up and jamming will be explained in detail. The effects of ice on river hydraulics and hydraulic systems operation will be investigated. River and lake ice mechanics, ice safety and ice mitigation strategies will be discussed. Where possible, students will have an opportunity to gain practical experience through labs and project work.

CIVL 7654 Advanced Hydraulics 3 cr
This course provides an introduction to advanced hydraulics, including physical hydraulic modelling, sediment transport (cohesive and non-cohesive) and analysis and design of several different types of hydraulic structures. Additional advanced topics such as coastal engineering and fish passage will be covered as appropriate.

CIVL 7656 Advanced Fluid Mechanics 3 cr
Introduce concepts in advanced fluid mechanics including topics in theoretical fluid mechanics, experimental fluid mechanics and environmental fluid mechanics.

CIVL 7658 Computational Hydraulics 3 cr
Introduce concepts and procedures for the computational modelling of open channel hydraulic engineering problems including numerical methods and best modelling practices.

CIVL 7660 River Engineering 3 cr
Classification of rivers; regime of river channels; channel patterns, sediment transport; design of stable channels; engineering interference (diversions, dams, dredging); river training works; hydraulic-model studies of rivers.

CIVL 7680 Soil/Ground Improvement Techniques 3 cr
Analysis and design of mechanical and chemical treatment techniques commonly applied to problem foundation soils for civil engineering structures. Mechanical modification; hydraulic modification; modification by admixtures; modification by reinforcement and confinement; in-situ evaluation of soil improvement and monitoring.

CIVL 7700 Water Resources Planning 3 cr
Principles and methodologies of planning water resources development projects. An evaluation of a major multi-purpose project from inter-disciplinary viewpoints, incorporating those of designers, planners, critics and political decision makers.

CIVL 7710 Coastal Hydraulics 3 cr
Mechanics of wave motion; wave and water level predictions; types and design of coastal protection; littoral processes.

CIVL 7720 Groundwater and Solute Transport Modelling 3 cr
The physics and numerical solution of mathematical models of steady-state and transient groundwater flow and mass transport in the saturated and unsaturated zones; introduction to the finite difference and finite element methods; popular software; other modelling techniques, including random-walk particle methods; modelling groundwater contamination; non-linear problems; applications to regional groundwater flow and groundwater recharge, aquifer resource evaluations, contamination prediction.

CIVL 7730 Groundwater Engineering 3 cr
The role of geology and hydrogeology in the siting, design of engineering structures; synthesis of groundwater mechanics in various geologic environments; case studies in construction dewatering, groundwater resource evaluation, subsidence, seepage in dams and foundations and slope stability; basic review of analytic solutions and numerical methods.

CIVL 7740 Special Topics in Hydrology 3 cr
Selected topics examining the statistical aspects of hydrology. Time series analysis; disaggregation processes; flood frequency analysis; analysis of extremes.

CIVL 7750 Advanced Civil Engineering Systems 3 cr
Optimization of Civil Engineering Systems. Use of linear and dynamic programming and network theory in all aspects of civil engineering. Introduction to the use of stochastic processes in operations research. Particular emphasis is given to water resources and environmental and transportation engineering.

CIVL 7760 Recent Developments in Bridge Engineering and Structural Health Monitoring 3 cr
Introduction to Intelligent Sensing for Innovative Structures (ISIS); Introduction to Civionics and Structural Health Monitoring; Sensors and Data Acquisition Systems; Theoretical Evaluation of Bridge Decks; Theoretical Evaluation of Cantilever Slabs; Theoretical Evaluation of Girders; Theoretical Evaluation of Columns; Bridge Inspections and Maintenance; Conceptual Design and Aesthetic Design of Bridges.

CIVL 7770 Hydrological Processes 3 cr
Runoff generation and runoff modelling; scale effects in hydrology; ramifications of distributed and lumped approaches; computer models of watershed modelling; optimization schemes and minimization functions; special concerns dealing with digital elevation models.

CIVL 7776 Advanced Concrete Technology 3 cr
Advanced properties of concrete are introduced through studying key constituent materials (e.g. cement, mineral and chemical admixtures). Concepts of design and control of concrete mixtures are described through defining performance criteria in the field. Characteristics and applications of special concretes (e.g. high-performance and self-consolidating concrete) are covered. Each topic is discussed with respect to mechanisms of action, construction specifications and requirements in Canadian and American standards.

CIVL 7778 Durability of Concrete 3 cr
Durability of concrete as a material. Deterioration of concrete in the field due to various damage mechanisms. Frost damage, corrosion of reinforcement, sulfate attack, etc. Durability-based design requirement in building codes.

CIVL 7780 Advanced Behaviour and Design of Steel Structures 3 cr
Behaviour and design of welded thin-walled members; plate girders, composite construction, beam-columns, and connections. Special topics such as stability of metal structures and bracing requirements are also covered.

CIVL 7790 Pavement Evaluation and Performance 3 cr
Pavement classification, pavement management, performance measures, condition surveys, sensor technology, material sampling, test methods on asphalt binders and unbound layers, non-destructive testing, sources of variability, pavement maintenance, rehabilitation, long-term performance.

CIVL 7800 Design of Light Industrial Steel Buildings 3 cr
Design criteria for metal building systems; behaviour and design of tapered and prismatic built-up columns and girders; design of gable frames; behaviour and design of cold-formed members; bracing requirements for metal buildings and design of connections.

CIVL 7810 Flow and Transport in Fractured Rock 3 cr
The physics and numerical solution of mathematical models of flow and transport processes in fractured rocks; scale effects; single, dual, and mixed modelling techniques; heat flow and transport in fractured rock systems; applications to local and regional groundwater flow.

CIVL 7820 Operational Hydrology 3 cr
Hydrographic analysis; relation between the physical processes and the hydrograph; estimation and prediction. Floods; statistical analysis; maximum probable floods. Water supply; estimates of dependable flow, simulation, synthetic flow series, statistical analysis.

CIVL 7840 Traffic Systems Analysis 3 cr
Mathematical theories of traffic flow, introductory queueing theory with application to traffic performance at intersections; travel forecasting principles and techniques; the use of simulation in traffic engineering design.

CIVL 7850 Advanced Structural Dynamics 3 cr
Responses of single-degree-of-freedom and multi-degree-of-freedom systems, damped and undamped systems, linear and inelastic systems to dynamic excitations; free vibration, forced vibrations. Special emphasis on responses of civil structures to seismic and blast loadings.

CIVL 7870 Advanced Engineering Analysis 3 cr
Analytical techniques used in engineering, including such topics as the application of complex variables, partial differential equations, generated Fourier series, integral transforms, and special functions, to advanced problems in civil engineering.

CIVL 7920 Theory of Water Treatment 3 cr
Physical and chemical characteristics of water; water treatment processes including coagulation/flocculation, sedimentation, filtration, softening, adsorption, ion exchange, disinfection, and membrane processes.

CIVL 7930 Theory of Waste Treatment 3 cr
Characteristics of waste-specific and generic determinations; unit operations and unit process for physical, chemical and biological treatment and transformation of particulate and dissolved contaminants. Biochemical transformations and degradation of hazardous pollutants; unit processes for enhanced nutrient removal and hazardous waste treatment. Full treatment trains for industrial and municipal waste treatment, including solids handling.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: CIVL 3700 and CIVL 3690 or permission of instructor.

CIVL 7950 Environmental Engineering Laboratory 3 cr
Laboratory work in water and wastewater analysis and treatment processes related to water quality management.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CIVL 7930 and CIVL 7920.

CIVL 7960 Environmental Engineering Design 3 cr
Design of unit operations. Planning, cost effectiveness analysis, and conceptual design of a whole wastewater treatment plant.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CIVL 7930.

CIVL 7990 Special Topics in Transportation 3 cr
Lectures and seminars on selected topics in transportation not covered in the formal coursework.

Classical Studies (CLAS)

CLAS 7000 Proseminar in Classical Studies 1 0 cr
Seminars in which faculty members or invited speakers introduce subfields, methods, and resources within Classics. Attendance and participation are required from Classics MA students during the first year of their program. This is part of a pair of required courses. This course is graded Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: none.

CLAS 7002 Proseminar in Classical Studies 2 0 cr
Seminars in which faculty members or invited speakers introduce subfields, methods, and resources within Classics. Attendance and participation are required from Classics MA students during the first year of their program. This is part of a pair of required courses. This course is graded Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: none.

CLAS 7300 Topics in Greek Art and Archaeology 3 cr
This course will investigate aspects of Greek art, archaeology, and material culture, emphasizing different topics, methods, genres, or theoretical approaches. Possible topics include artistic media, the archaeology of particular regions, and archaeological approaches to the economy and other issues in social history. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

CLAS 7302 Topics in Roman Art and Archaeology 3 cr
This course will investigate aspects of Roman art, archaeology, and material culture, emphasizing different topics, methods, genres, or theoretical approaches. Possible topics include artistic media, the archaeology of particular regions, and archaeological approaches to the economy and other issues in social history. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

CLAS 7310 Readings in Selected Topics 3 cr
Intensive study of one or more authors in Greek or Latin literature or of a special topic in ancient history. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

CLAS 7400 Major Research Paper 0 cr
Develop advanced skills in the formulation of a focused research question, develop a method for approaching it, assemble an in-depth bibliography comprising primary and secondary sources, and independently write a research paper of 8,000-10,000 words documenting the results of this research. This course is graded on a pass/fail basis.

Community Health Sciences (CHSC)

CHSC 6810 Biostatistics for Clinicians 3 cr
This course is designed for students in clinical Master's programs in Medicine, Pharmacy, Dentistry and Nursing. It is designed as a basic biostatistics course that will introduce the tools needed to read and understand quantitative health literature.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: Permission of instructor.

CHSC 7200 Current Concepts in Global Health: Populations, Policies and Programs 3 cr
The course will focus on global patterns of mortality and morbidity, and the organization of health care services. Social, cultural, and economic issues will be related to health and health services.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: instructor permission.

CHSC 7212 Critical Perspectives on Gender and Health 3 cr
This course explores gendered health issues from an interdisciplinary feminist perspective. Placing particular emphasis on the intersections amongst race, class, gender, and sexuality, this course explores how the contemporary concepts of "health" and "illness" have come to make sense in and through constructions of masculinity and femininity. Using feminist theories of gender embodiment to examine a range of topics pertaining to health, this course requires students to question common-sense and bio-medical understandings of health and illness.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Instructor permission required.

CHSC 7220 Health and Health Services of First Nations, Métis and Inuit Peoples 3 cr
Seminar-based course critically examines First Nations, Metis and Inuit health status, health care services, historical assumptions about indigenous populations, and 'pre-Canada' world events influencing European colonization of this land with resultant marginalization of original indigenous Peoples.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission to register.

CHSC 7230 Maternal Health 3 cr

CHSC 7232 Families and Care Across the Life Course 3 cr
Advanced study of the provision of care by family members and friends for dependent children and adults with long-term care needs in the context of increasing family diversity and population aging. Topics include theoretical perspectives on care, the gendered nature of care, consequences of care and policy implications.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7250 Science and Practice of Knowledge Translation in Health Research 3 cr
This course will provide students with an overview of the fundamental aspects and current state of knowledge translation (KT) science and practice in health research and care. The topics covered in this course will equip the student with the basic principles required to integrate knowledge translation science into health research and apply best KT evidence and methodologies to their dissemination and implementation activities.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Instructor permission is required.

CHSC 7270 Epidemiology of Chronic (Non-Cancer) Diseases 3 cr
The objective is to study the natural history of chronic diseases including the distribution of diseases, risk and prognostic factors, rationale and strategies for prevention. The methodological issues concerning the investigation of severe disease are also discussed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520, CHSC 7820, or instructor permission.

CHSC 7290 Economic Evaluation of Health Care 3 cr
The objectives of this course are to enable students to understand economic evaluation methodologies (cost-effectiveness, cost-benefit, cost-utility analysis) as applied to health care and to familiarize them with the applied literature on economic evaluation of health care.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7810 or CHSC 7820, and CHSC 7520, or instructor permission.

CHSC 7300 Health Policy and Planning 3 cr
This course defines health policy and describes the planning and decision-making process. Case studies will be used to illustrate and critique the substance, process and outcome of policy papers that address contemporary policy issues.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7310 Epidemiology of Health Care 3 cr
This course will discuss the advantages and disadvantages of using large administrative data bases for research purposes. Substantive topics dealt with include: population health and the role of medical care, assessing system performance, quality of care and outcomes, short and long-term outcome studies, technology assessment, and use of pharmaceuticals. Policy implications are considered. Students are required to learn SAS, a computer programming language and to analyze and interpret data for the term project.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Instructor permission is required.

CHSC 7320 Organization and Financing of the Canadian Health Care System 3 cr
The purpose of this course is to help students develop the knowledge and skills to understand and improve Canadian healthcare. The course provides an introduction to the way the Canadian health system is organized and financed; covers key policy issues and controversies; and examines the challenge of change.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7330 Cultural Perspectives on Illness and Medical Practice 3 cr
The objective of this course is to make students aware of the ways in which disease, illness, and medical practice are socially and culturally mediated. The course will examine cultural influences on the experience and expression of illness and consider the medical practitioner's role in the development and provision of culturally responsive health care.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7360 Clinical Trials 3 cr
The Randomized Clinical Trial is the only true experiment in clinical research. This course is intended to give students detailed knowledge of the design and implementation of RCTs. Students will participate in a qualitative review of RCTs. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520, CHSC 7820.

CHSC 7362 Systematic Reviews and Meta-Analysis 3 cr
Systematic reviews and meta-analysis are integral to research success. Lectures and skill sessions will parallel the steps needed for successful completion of rigorous systemic reviews and meta-analyses of intervention studies. Instructor permission is required.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520 and CHSC 7820.

CHSC 7380 Prevention and Health 3 cr
The course will cover frameworks used in formulating preventive strategies. Topics will include risk factor assessment, screening, health education, legislation, litigation, lifestyle and prevention. Actual case studies will be used. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520.

CHSC 7390 Health Promotion 3 cr
Examination of the history, theories, principles, and settings for health promotion. Assumptions underlying the discipline and how they affect practice are explored. Different conceptualizations of health and implications for practice are examined. Recent health promotion strategies are critically analyzed using case studies.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7400 Directed Readings I: In Epidemiologic Methods 3 cr
An opportunity for advanced students to acquire knowledge in a defined and specific area of interest.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: permission of instructor and Graduate Program Director.

CHSC 7410 Directed Readings: II - In Epidemiology 3 cr
An opportunity for advanced students to acquire knowledge in a defined and specific area of interest.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor and Graduate Program Director.

CHSC 7430 Seminars on Advanced Topics: II - In Methods of Health Care 3 cr
Seminars dealing with current research issues, emerging methodologies and analytical techniques will be offered for advanced students.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7450 Epidemiology of Communicable Diseases 3 cr
Overview of epidemiological principals in communicable disease investigation and prevention and specific issues in controls of certain specific communicable diseases of public health importance in Canada will be introduced. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520, CHSC 7820.

CHSC 7460 Environmental and Occupational Health 3 cr
The aim of the course is to acquaint the student with the role of the environment (general and specifically working) as the determinant of health. The content of the course will be presented in the form of lectures, seminars, and field visits. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520.

CHSC 7490 Empirical Perspectives on Social Organization and Health 3 cr
This course will focus on a selected review of the epidemiological literature which has integrated social factors in the investigation of the distribution of health and illness in society. The course will review a selection of important empirical studies in investigating the roles played by social, psychological and economic status factors in determining health and illness. Emphasis will be placed on identifying the central theoretical and methodological approaches to defining and measuring socioeconomic status in this literature. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520, CHSC 7820.

CHSC 7500 Conc. Public Health 3 cr
Public Health is a multi-disciplinary field of inquiry and practice that addresses the social and biological dimensions of population health. This course represents part one (with CHSC 7502) that is designed to provide students with a breadth of exposure to core competencies and content areas important to public health practice. This course provides students with an introduction to the historical and current theoretical debates relating to the science and art of protecting, promoting and restoring the health of the population through organized societal activity, public health law and ethics. Students will also gain relevant introductions to inequities in health, Indigenous health, environmental and occupational health, knowledge translation, and so forth. Specific content for each part of the two courses will be structured in such a way to complement more advanced program offerings in these topic areas.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Instructor permission is required for students not admitted to the CHS Master of Public Health Program.

CHSC 7502 Core Concepts in Public Health 2 3 cr
Public Health is a multi-disciplinary field of inquiry and practice that addresses the social and biological dimensions of population health. This course represents part two (with CHSC 7500) of the breadth of exposure to core competencies and content areas important to public health practice. Combined with CHSC 7500, this course adds to relevant debates relating to the science and art of protecting, promoting and restoring the health of the population through organized societal activity, public health law and ethics. Students will also gain relevant introductions to health policy, health promotion, prevention and health, and so forth. Specific content for each part of the two courses will be structured in such a way to complement more advanced program offerings in these topic areas.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Instructor permission is required for students not admitted to the CHS Master of Public Health program.

CHSC 7510 Problem Solving in Public Health 3 cr
This seminar based course focuses on current issues and topics in community health to advance skills of thinking critically and communicating clearly about practical solution to public health problems. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520.

CHSC 7520 Principles of Epidemiology 3 cr
This course will introduce the basic concepts and methods of epidemiology, including the definition and measurement of health status and health determinants in populations, assessing health risks and inferring causation, and issues in the design and analysis of population health studies.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7530 Applied Public Health Epidemiology 3 cr
This course builds on the Principles of Epidemiology course through an applied focus. It discusses the application of epidemiological principles in applied public health practice including the investigation of outbreaks, disease surveillance and the basic concepts of social network analysis, vaccine epidemiology and mapping. Students will also gain an understanding of the principles of prevention in public health practice, the benefits of qualitative methods and the role of the laboratory in outbreak investigation. They will receive instruction on the use of software for database development, data entry, analysis, and presentation of results. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520, CHSC 7810 or CHSC 7820.

CHSC 7540 Advanced Epidemiology 3 cr
Advanced epidemiological research methods focusing on selected epidemiological issues (bias, confounding, matching, etc.). Discussion will be directed to both epidemiological and statistical considerations to find the optimal solution to a research problem. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520 (B+) or CHSC 7820 (B+). CHSC 7810 (B+) may be acceptable with instructor permission.

CHSC 7560 Epidemiology of Cancer 3 cr
This course introduces the magnitudes, risk factors and prevention strategies of cancer. It focuses on current knowledge related to the etiology of cancer, medical interventions and potential for prevention. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520.

CHSC 7580 Public Health Field Placement 0 cr
The aim of the field placement is to highlight the relationship between learning and application of public health principles and practice through the integration of coursework with supervised fieldwork undertaken in local, provincial, or national public health settings. It is specifically designed for MPH students who do not have extensive public health experience, or who seeks a public health experience in a setting different from their primary professional background, and is open to any MPH student seeking further public health practice experience. In addition, to meeting educational objectives (to be set in consultation with the MPH Advisory committee and the Field Placement Supervisor at the host agency), students will participate in the day-to-day activities of the host agency. The site of the field placement will be based on the student's career interests and learning needs, and be located in a public health organization or agency, or situated within a public health program or service. Field placements are expected to be anywhere from 12 – 16 weeks full time equivalent (minimum is 12 weeks) and evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: Students must have the permission of the Director of the Graduate Program to register.

CHSC 7590 Capstone Research Project in Public Health 0 cr
The capstone project in public health is designed as an alternative to CHSC 7580 for eligible MPH students who already have extensive public health practice experience. The aim of the capstone project is for a student to develop some research experience in carrying out a research project, limited in scope, that has applied public health relevance. The capstone research project is expected to be conducted within 12 – 16 weeks full time equivalent (minimum is 12 weeks). For the majority of students, their project will be part of a larger research program led by a Faculty PI who will be a research supervisor for the project. On occasion, students may develop an independent research question to pursue, but this will be done in consultation with faculty, and the project will need to be completed within the allotted timeframe. As part of the project, students will consult the relevant published literature, other sources, develop and carry out a research plan, write a report of their findings, and make a public presentation. Prior to the start of the capstone project, the student will have already developed the research question and a proposal that has been reviewed by the Research Project Supervisor and the MPH Advisory Committee, following which, if appropriate, a submission to the research ethics office will have been initiated. Evaluation is based on a pass/fail basis. Students must have the permission of the Director of the Graduate Program to register.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7860.

CHSC 7610 Advanced Topics in Community Health 1 1.5 cr
Special advanced research topics in Community Health Sciences.

CHSC 7620 Advanced Topics in Community Health 2 1.5 cr
Special advanced research topics in Community Health Sciences.

CHSC 7630 Work and Family Interrelationships 3 cr
In this course students will engage in advanced study of the intersection of earning and caring activities of families over the life course and how these activities interrelate at the community, provincial, national, and global levels. The influence of gender and demographic trends will be explored and family, private sector, and public sector responses to the issue will be examined. There will also be an emphasis on relating current research to relevant theoretical perspectives and professional practice. May not be held with the former FMLY 7230.
Mutually Exclusive: FMLY 7230

CHSC 7632 Evaluation of Family, Health and Social Development Programs 3 cr
This course teaches the theory and practice of program evaluation with a focus on health and social development programs. It emphasizes a utilization-focused evaluation approach. It studies program evaluation from a "real world" perspective, including the political and ethical issues related to evaluation. The course provides strong theoretical foundations. Students put this into practice by working with a particular agency/program to fully develop an evaluation plan to be actually used by the agency/program. May not be held with the former FMLY 7500.
Mutually Exclusive: FMLY 7500

CHSC 7634 Research Data Centre Research Methods Part I 1.5 cr
This course will introduce the processes and methods involved in using Statistics Canada's confidential master data files at the Research Data Centre (RDC). Students will gain skills in conducting secondary analyses in order to address important health and social policy research questions. May not be held with the former FMLY 7510.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre or Co-requisite: Graduate level biostatistics course or equivalent.
Mutually Exclusive: FMLY 7510

CHSC 7636 Research Data Centre Research Methods Part II 1.5 cr
A continuation of the introduction to the processes and methods involved in using Statistics Canada's confidential master data files at the Research Data Centre (RDC). Students will gain skills in conducting secondary analyses in order to address important health and social policy research questions. May not be held with the former FMLY 7520.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: Successful completion of Part I (CHSC 7634).
Mutually Exclusive: FMLY 7520

CHSC 7638 Children and Violence 3 cr
An examination of children's experiences of violence at the levels of families, communities and societies. Relevant theoretical and measurement issues are addressed, as well as the developmental outcomes of various forms of violence. The incidence and prevalence of violence in children's lives is examined. Models of prevention, intervention and policy are explored. May not be held with the former FMLY 7620.
Mutually Exclusive: FMLY 7620

CHSC 7640 Family Violence 3 cr
Advanced study of current topics in family violence. Topics may include child abuse, sibling abuse, parent abuse, dating violence, intimate partner violence, and elder abuse. Emphasis is on understanding and critiquing current theory and research. May not be held with the former FMLY 7800.
Mutually Exclusive: FMLY 7800

CHSC 7642 Family Conflict and Health and Well-being 3 cr
The origins and manifestation of conflict in family relationship across the life course will be reviewed with an emphasis on its relation to individual, dyadic, and family health and well-being. May not be held with the former FMLY 7810.
Mutually Exclusive: FMLY 7810

CHSC 7644 Social Development in Theory and Practice 3 cr
This advanced seminar examines the concepts and practices of social development within specific contexts. It examines the interplay between theory and practice and the epistemological underpinnings of social development research, programs, and policies as applied to families, communities, and populations. Case studies are assessed and critiqued. May not be held with the former FMLY 7930.
Mutually Exclusive: FMLY 7930

CHSC 7710 Social Aspects of Aging 3 cr
This course is an advanced seminar designed to examine current social issues in aging. The course is organized around selected topics related to aging. Where possible, the Canadian experience will be compared to international trends and diversity will be highlighted. The first section is a review of the field of gerontology, ageism, demographic trends, theoretical perspectives and methods and the second section explores contemporary social issues.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7720 Health and Aging 3 cr
This course is an advanced seminar designed to examine health and health care issues in aging. Where possible, the Canadian (or Manitoban) experience will be highlighted. Key topics in the health domain will be covered, such as frailty, mental health and dementia. The provision of care for older adults will also be covered, focusing on both the formal care system, as well as informal care providers.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7730 Topics in Health Services Research 3 cr
This course will expose students to select health services research topics that are particularly relevant in Manitoba and Canada. Students are expected to actively engage in seminars led by health services researchers and decision-makers, and also provide informative presentations in their own area of research. Students will also gain knowledge about various communication and knowledge translation strategies. Students outside CHS require instructor permission.

CHSC 7738 Qualitative Research Methods in Community Health Sciences 3 cr
The purpose of this course is to provide students with fundamental knowledge on theoretically informed qualitative inquiry for applied health services and health policy research. The course will include an introduction to social theory and respective qualitative methodologies best suited for population health, health services, social and cultural determinants of health, and health policy research. By the end of the course, students will have an understanding of the principles and practices involved in: integrating theory and qualitative methods; community engagement in qualitative research, including indigenous methodologies and diverse cultural contexts; the design of a theory driven qualitative research study; various ways of generating and analyzing qualitative data; integrated Knowledge Translation; and ethics, among other topics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7740 Advanced Qualitative Research Methods in Community Health Sciences 3 cr
The purpose of this seminar-based course is to provide students with advanced knowledge on transformative qualitative research methodologies, methods and analysis related to redressing health inequities from a strength-based interdisciplinary perspective. Using case study and other applied approaches students will gain knowledge and experience in: the application of critical social theories to health research; understanding processes of community, stakeholder, and partnership engagement from multiple scales and perspectives (e.g. indigenous populations locally and globally); various ways of generating qualitative data and analyzing texts consistent with selected theory; developing different products for knowledge exchange activities; and the ethics and politics inherent within the research process.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7738 (formerly FMLY 7710) or instructor permission is required.

CHSC 7810 Biostatistics for the Health and Human Sciences 3 cr
An introduction to statistical ideas and techniques for health sciences and human research. Describing data, patterns in data, the normal distribution. Principles of estimation and principles of hypothesis testing. Principles and practice of the major statistical tests (t tests, analysis of variance, Chi squared tests, correlation and regression). Nonparametric statistical techniques. The use of statistical software to carry out statistical analysis. Analytical decision strategies.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside CHS require instructor permission.

CHSC 7820 Biostatistics for Community Health Sciences 3 cr
The course will cover techniques of research design and analysis for community health researchers. Topics include: principles of experimental design, study size determination, statistical software as an analytical tool, techniques for the analysis of continuous outcomes, analysis of variance for multi-way, factorial and split-unit experiments, and multiple regression and general linear models. Introduction to more advanced statistical methods including logistic regression and survival models. Instructor permission is required.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: 3 credit hour statistics course within five years.

CHSC 7830 Advanced Biostatistics for Community Health Sciences 3 cr
This course focuses on Generalized Linear Models. Upon completion of the course, students will be able to: 1) give examples of different types of data arising in public health studies; 2) understand differences and similarities between standard linear regression and models for discrete outcomes; 3) use modern statistical concepts such as binomial and Poisson in public health studies; 4) understand models for polytomous outcomes; 5) conduct and interpret logistic, conditional logistic (case-control), and prohibit regression inference; 6) conduct and interpret time-related outcome variables including survival analysis and proportional hazard regression; 7) conduct and interpret Poisson outcome variables and Poisson regression. Instructor permission is required.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7820 (B+).

CHSC 7840 Current Topics in Biostatistics: Design and Analysis 3 cr
This course will introduce students to leading-edge advanced study design and statistical analysis methods for health research. The course will use case studies to explore the study design and analysis topics and their applications.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: CHSC 7520; CHSC 7820 (B+); CHSC 7860, or instructor permission is required.

CHSC 7850 Advanced Biostatistical Methods for Hierarchical and Longitudinal Data 3 cr
The course teaches statistical methods for analyzing hierarchical ("multi-level") data and longitudinal data. Mixed models are rapidly becoming the principal statistical tools for understanding hierarchical or "multi-level" data, such as the academic achievement of students within school classes within schools and perhaps within communities. The longitudinal application of " mixed models" provides analysis of temporal trajectories, for example, of the health of individuals (potentially nested within families, or communities) over time. Mixed models also can be utilized to analyze relationships, for example between health and income, over time, for individuals or families within communities, etc. The course will focus on the conceptualization, estimation, and interpretation of mixed models in SAS. The primary emphasis will be on linear mixed models for continuous outcomes, however, nonlinear mixed models for categorical or count outcomes will also be discussed. Instructor permission is required.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: CHSC 7820 (B+).

CHSC 7860 Methods and Concepts for Community Health Sciences 3 cr
This course is designed to provide a practical introduction to qualitative, quantitative, and mixed method approaches used in health research. The emphasis in the course will be on developing research questions, selecting appropriate methods, and writing a research proposal. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Co-requisites: 1) CHSC 7520 and ONE of the following: CHSC 7820 or CHSC 7810 or CHSC 7738.

CHSC 7870 Health Survey Research Methods 3 cr
Students critically examine the use of health survey methodology within epidemiology. They also learn to apply survey methodology, as a means to gain a strong appreciation of the reflective, theoretical and analytical thinking required to successfully design and implement epidemiological health surveys. Students outside CHS require instructor permission.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7520.

CHSC 8600 Senior seminar in Community Health Sciences 3 cr
This course is an advanced seminar designed to examine various aspects of health research and health. The emphasis in the course will be on: interrogating assumptions that underlie what research is conducted and how it is conducted; including a diversity of experiences and perspectives in research; and critically appraising the quality of research. This is an advanced course intended for Ph.D. students.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHSC 7810 or CHSC 7820, or CHSC 7738, and CHSC 7860; instructor permission is required for students outside the Community Health Sciences Ph.D.

Computer Science (COMP)

COMP 7210 Research Methodologies 3 cr
This course explores the research process in general and the resources for research in computer science. Traditional research approaches and use of emerging technology will be discussed. Attendance at department seminars and classes is required.

COMP 7570 Advanced Topics in Computer Science 1 3 cr
Topics of current research interest in areas of computer science, available on an occasional basis, subject to the interests and availability of faculty.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7600 Graduate Workterm I 0 cr
Work assignment in business, industry, or government for students registered in the Computer Science Graduate Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. Graded Pass/Fail.

COMP 7720 Advanced Topics in Algorithms 3 cr
Topics of current research interest in advanced algorithms. Possible topics include string matching, data compression, computational geometry, probabilistic algorithms; subject to the interests and availability of faculty.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: COMP 3170 or equivalent or written consent of instructor.

COMP 7750 Advanced Topics in Computation Theory 3 cr
Topics of current research interest in computation and complexity theory. Possible topics include decidability and complexity theoretic issues in parallel computation, cryptography, graph theory, or number theory, subject to the interests and availability of faculty.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7770 Coding Theory 3 cr
Algebraic background of coding theory. Possible topics include theory of linear codes; Hamming, Golay, Reed-Miller, Macdonald, and Hadamard codes; structure of finite fields; application to cyclic and Bose Chaudhuri codes; and decoding algorithms and error-correcting bounds.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7780 Queuing Theory and Performance Evaluation 3 cr
Theory and application of queuing systems applied to problems of computer systems performance. Possible topics include investigation of deterministic and stochastic models of single and multiple queuing systems using analytical, numerical, and simulation techniques; performance evaluation methods for computer systems and communications networks.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: written consent of instructor.

COMP 7800 Graduate Workterm II 0 cr
Work assignment in business, industry, or government for students registered in the Computer Science Graduate Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. Graded Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: COMP 7600.

COMP 7810 Computer Networks 3 cr
A selection of current research topics in computer networks, including advanced network architectures, protocols, and systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7850 Advances in Parallel Computing 3 cr
This course introduces advanced research topics in parallel architectures, parallel programing, parallelizing compilers, runtime systems, and parallel I/O.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7860 Advanced Topics in Computer Systems 3 cr
Topics of current research interest in database and operating systems. Possible topics include: operating systems, parallel systems, real-time systems, networks, and database systems; subject to the interests and availability of faculty.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7890 Advanced Topics in Languages and Software 3 cr
Topics of current research interest in software engineering. Possible topics include requirement analysis, software architecture, software evolution, and software verification and validation.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7900 Graduate Workterm III 0 cr
Work assignment in business, industry, or government for students registered in the Computer Science Graduate Cooperative Option. Requires submission of a written report covering the work completed during the four-month professional assignment. Graded Pass/ Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: COMP 7800.

COMP 7910 Advanced Graphics 3 cr
Advanced topics in computer graphics. Possible topics include advanced lighting models and radiosity, ray tracing, computational photography, graphics architectures, procedural graphics, model and mesh processing, splines and curves, and advanced rendering techniques.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: written consent of instructor.

COMP 7920 Advanced Topics in Graphics and Human Interfaces 3 cr
Topics of interest in advanced Human-Computer Interaction (HCI). Possible topics include quantitative and qualitative evaluations, crowdsourcing methods and applications, personal informatics, persuasive technologies, technologies for special populations, and information visualization. COMP 4020 is recommended.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7922 Computational Geometry 3 cr
The design and analysis of efficient algorithms for geometric problems. Possible topics include convex hull algorithms; Voronoi diagrams and Delaunay triangulations; point location; range searching; geometric data structures; geometric intersection algorithms; guarding and visibility graphs; geometric packing, covering, and partitioning; geometric duality; arrangements of lines and circles; unit disc graphs and proximity graphs.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: written consent of instructor.

COMP 7924 Graph Drawing 3 cr
The design and analysis of efficient algorithms for drawing a given graph in the plane subject to given constraints and optimization criteria. Possible topics include drawing rooted trees, planarity testing, drawing planar graphs, straight-line drawings, point-set embeddings, visibility graphs, and contact graph representations.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7926 Computational Finance 3 cr
Application of Computer Science to the field of Computational Finance. Possible topics include an overview of equity, fixed income, derivative markets; stochastic calculus, Black-Scholes model; volatility, risk and value-at-risk; binomial tree, Monte-Carlo, finite-difference, and other numerical methods, complex financial instruments such as swaps, collateral debt obligations; derivatives mishaps.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7928 Probabilistic Graphical Models 3 cr
Probabilistic graphical models and their applications in advanced machine learning. Possible topics include directed model (Bayesian networks), undirected models 9Markov random fields), inference, and learning in various application domains, e.g., computer vision, natural language processing, bioinformatics, and speech processing.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7932 Advanced Intelligent Interactive Systems 3 cr
Topics of interest at the intersection of Human-Computer Interaction (HCI) and applied Artificial Intelligence (AI). Possible topics include recommender systems, information extraction and summarization, intelligent learning environments, usability concerns, evaluation, and reasoning under uncertainty.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: written consent of instructor.

COMP 7934 Topics in Bioinformatics 3 cr
Topics of interest in Bioinformatics. Possible topics include genome assembly, protein structure prediction and sequence feature prediction.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7936 Advanced Human- Robot Interaction 3 cr
A survey of fundamentals and current topics in Human-Robot Interaction, including tele-operation, collocated work, and social human-robot interaction. Students will read a range of research publications on Human-Robot Interaction, and develop an original research project relating to interaction with robots.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7938 Software Testing and Quality Assurance 3 cr
Fundamental techniques and state-of-the-art research in software quality assurance. The primary focus is on software testing techniques, but other quality assurance approaches are also discussed, such as static analysis, code review, defect prediction, and fault localization.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7942 Real-Time Embedded Systems 3 cr
Topics of interest in embedded systems, especially systems for real-time control and sensing. Extensions to distributed embedded systems are also discussed. Possible topics include scheduling, schedulability, servo motors, constraints in embedded systems, advanced real-time scheduling, control theory, distributed systems, and related programming languages.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7944 Advanced Data Mining 3 cr
Topics of interest in data mining, include advanced data mining concepts and their applications.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7946 Wireless Sensor Networks 3 cr
Topics of interest in wireless sensor networks, including architectures, protocols, and applications. Case studies of previous work and open areas of research will also be discussed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7948 Combinatorial Optimization 3 cr
Classical and current techniques in combinatorial optimization. Topics include linear and integer programming, matching algorithms, graph algorithms, networks and flows, and matroids.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7950 Advanced Topics in Artificial Intelligence 3 cr
Topics of current research interest in artificial intelligence chosen from such areas as: expert systems, knowledge representation, intelligent systems, planning systems, multi-agent systems, symbolic logic, knowledge engineering, and automated reasoning; subject to the interests and availability of faculty.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: COMP 3190 or equivalent or written consent of instructor.

COMP 7952 Grid and Cloud Computing 3 cr
Distributed computing systems; commercial grid services; working with real grid networks; applications on grid networks; virtualization and cloud computing; grid and cloud architecture and execution models; MapReduce; resource management (brokering, allocation, scheduling); quality of service guarantee; pricing cloud resources; economic and finance models; case studies.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

COMP 7960 Image Processing 3 cr
A detailed study of methods used in image processing. Major topics include image transformations, image enhancement, feature extraction, image analysis, and filtering.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

Dental Diagnostic and Surgical (DDSS)

DDSS 7010 Biology and Pathology of the Periodontium 6 cr
Selected topics in cell biology precedes a comprehensive and detailed survey of the periodontium, its constituent tissues and its function; the cell dynamics of inflammation and wound healing and the histopathology of the early and advanced periodontal lesion.

DDSS 7030 Advanced Oral Radiology 1 cr
This course is proposed to accommodate the accreditation requirements of the Graduate Periodontal residency program, and to include other graduate level residents, due to the emerging three dimensional imaging being more utilized in the fields of dentistry.

DDSS 7050 Oral Medicine and Oral Diagnosis 3 cr
This course provides the student, through clinical rotations, with the opportunity to enhance diagnostic and non-surgical management of oral pathologic conditions including mucosal and intrabony lesions, temporomandibular joint disorders, and oral manifestations of systemic disease in both otherwise healthy and medically compromised patients.

DDSS 7120 Advanced Clinical Periodontics 4 cr
This seminar course will review contemporary clinical periodontics by considering assigned readings in current texts and review articles. This course is intended to assure that students have a comprehensive overview of conventional periodontal therapy early in their education.

DDSS 7130 Occlusion 3 cr
A seminar series devoted to the diagnosis, treatment planning and management of patients with craniomandibular disorders.

DDSS 7160 Basic Clinical Periodontics 2 cr
This course is given at the onset of the program to provide an opportunity to review the basic aspects of Periodontics. The lab component will review scaling and root planning techniques, instrumentation and oral hygiene aids to familiarize residents with North American amamentarium.

DDSS 7210 Clinical Practice in Periodontics 18 cr
Designed to provide the clinical experience which is essential for specialty practice in Periodontics (circa 1600 hours).

DDSS 7220 Essay/Research Project 0 cr
An essay/research project is required for each student. It is selected in consultation with, and approved by the department head. This course is graded pass/fail.

DDSS 7230 Advanced Oral Pathology 6 cr
Common and/or significant oral and paraoral disorders, relevant to various dental specialties, are discussed using a seminar format. Recognition, description, etiopathogenesis, clinical and/or radiographic features, histopathologic findings, biologic behavior and management of such conditions are emphasized.

DDSS 7240 Advanced Oral and Maxillofacial Surgery Seminar 1 3 cr
This course includes a thorough review of the applied scientific basis for the practice of oral and maxillofacial surgery and emphasizes surgical anatomy and pathology, diagnosis and technique. Instruction will be given by means of lectures, seminars, case presentations and a critical review of current literature. Year I.

DDSS 7250 Clinical Advanced Oral and Maxillofacial Surgery 1 6 cr
The first year of hospital residency includes training in history taking and physical diagnosis; hospital protocols and ward procedure; minor oral surgery procedures and pain control techniques; operating room procedures and general in-patient care. Year I.

DDSS 7260 Advanced Oral and Maxillofacial Surgery Seminar 2 3 cr
Lectures, seminars, case presentations and reviews of current literature will emphasize the state of current knowledge regarding the clinical practice of advanced oral and maxillofacial surgery. Year 2.

DDSS 7270 Clinical Advanced Oral and Maxillofacial Surgery 2 6 cr
The second year of the hospital residency training program includes training in minor oral surgery, including dento-alveolar, pre-prosthetic surgery and implantology. It also provides an introduction to advanced oral and maxillofacial surgery and maxillofacial imaging. A rotation to Internal Medicine is included. Year II.

DDSS 7280 Clinical Advanced Oral and Maxillofacial Surgery 3 6 cr
The third year of the hospital residency training program includes rotations in Anaesthesia, Internal Medicine, General and Plastic Surgery, Surgical Intensive Care and Emergency Room. It also includes training in advanced oral and maxillofacial surgery. An elective rotation may also be arranged. Year III.

DDSS 7290 Clinical Advanced Oral and Maxillofacial Surgery 4 6 cr
The fourth year of the hospital residency training program is devoted to advanced oral and maxillofacial surgery. The student is designated chief resident and assumes a greater degree of responsibility in patient care and administrative activities. Year IV.

DDSS 7300 Dental Implantology 3 cr
A seminar course devoted to providing an in-depth understanding of the basic and applied aspects of the placement of dental root form implants in humans. This course is a prerequisite to the actual surgical placement of implants undertaken in DDSS 7210.

Disability Studies (Grad St.) (DS)

DS 7010 Disability Studies 6 cr
Explores the key concepts and issues in disability studies. Includes a critical examination of models and theories of disability, Canadian and other national laws and international standards, social and economic policy, and professional and service responses.

DS 7020 History of Disability 3 cr
Traces the historical development of responses to disability, by the medical/rehabilitation community, the governments, advocacy organizations and others. Canadian history will be the initial framework and the historical developments in other countries (including the UK, France, the USA, the Caribbean) will be used as a comparison.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or co-requisite: DS 7010.

DS 7030 Evaluation and Application of Research Methods in Disability Studies 3 cr
Provides a critical evaluation of quantitative and qualitative research methodologies used in disability studies. Methods to address disability used in different disciplines as well as transformative and empowerment methodologies such as participatory action and feminist disability research will be examined.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or co-requisite: DS 7010.

DS 7040 Selected Topics in Disability Studies 3 cr
One key theme will be chosen for each year from the interests and availability of faculty. Topics could include women with disabilities, international dimensions of disability, disability policy and practice, disability organizing and other topics developed over time.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or co-requisite: DS 7010.

Economics (ECON)

ECON 6040 Survey of Mathematical Topics for Economists 3 cr
A review of mathematical concepts used in economics, particularly at the graduate level. Topics include linear economic systems and matrix algebra, differentiation and optimisation, integration, economic dynamics and optimisation through time, and difference and differential equations. This course cannot be counted toward the minimum degree requirements for M.A. and Ph.D. degrees. This course is graded pass/fail.

ECON 7000 M.A. Research Workshop 3 cr
An examination of research methodology to assist students in understanding the process of research in Economics. Students will complete a research project under direct supervision. This is a required course for students in the M.A. by course work. This course is graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of department head.

ECON 7010 Econometrics I 3 cr
An advanced course in estimation and hypothesis testing in various regression models. Topics may include: asymptotic distribution theory; ordinary least squares estimation; maximum likelihood estimation; generalized least squares estimation; generalized method of moment estimation; and seemingly unrelated regressions estimation.

ECON 7020 Econometrics II 3 cr
An advanced applied course in cross-section and panel data econometrics. Topics may include logit, probit, heckman selection, and poisson; instrumental variables, difference-in-differences, regression discontinuity; fixed and random effects; dynamic panel models; quantile regression, nonparametric estimation; boostrapping.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECON 7010.

ECON 7032 Econometrics III 3 cr
Theory and applications of time-series analysis. Topics may include stationary univariate process; maximum likelihood estimation; Markov-switching models; state-space models; unit root process; vector autoregressive models; spurious regression; cointegration; and vector error correction models. Prerequisite ECON 7010.

ECON 7040 Topics in Applied Microeconomics I 3 cr
Advanced study in a selected topic in applied microeconomics. Topics covered in rotation include, but are not limited to labour economics, health economics, public finance, industrial organization, international trade, environmental economics, evaluation of public policy, production economics and applied game theory.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: A grade of C+ or better in ECON 7722 or former ECON 7720.

ECON 7050 Topics in Applied Microeconomics II 3 cr
Advanced study in a selected topic in applied microeconomics. Topics to be covered in rotation include, but are not limited to labour economics, health economics, public finance, industrial organization, international trade, environmental economics, evaluation of public policy, production economics and applied game theory.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECON 7722 or former ECON 7720.

ECON 7060 Advanced Heterodox Theory 3 cr
This course is a review and examination of heterodox economic theory. Core topics include the theory of capitalist production, effective demand and economic fluctuations, growth and accumulation, crisis theory, and the state and economic policy.

ECON 7130 Advanced Development Economics 3 cr
Introduction to development economics at the graduate level. A core objective is to provide breath in terms of the coverage of salient topics in economic development and rigor in terms of the level of analysis. The course presumes a substantive background in the basic tools of economic analysis. This is a required course for doctoral students who intend to make development economics one of their field specializations.

ECON 7140 Topics in Development Economics 3 cr
A generic course title intended to accommodate various topics in development economics. The specific topic will be chosen by the instructor.

ECON 7150 Evaluation of Public Policy and Programs 3 cr
This course will provide students with an advanced and critical understanding of the foundations and assumptions of modern program evaluation using cost-benefit, cost-effectiveness, public decision/choice theory and economic analysis. Case examples are drawn from government and non-government programs.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

ECON 7170 Topics in Heterodox Economics I 3 cr
Selected study of advanced work in a selected field of heterodox economics.

ECON 7180 Topics in Heterodox Economics II 3 cr
Selected study of advanced work in a selected field of heterodox economics.

ECON 7202 Industrial Organization 3 cr
The emphasis will be on market structures and strategic interaction among firms. Topics such as oligopoly pricing, price discrimination, strategic entry deterrence, product differentiation, advertisement, research and development, auction design, regulation, and anti-competitive behavior will be covered. Students may not hold credit for both ECON 7202 and the former ECON 7200.
Mutually Exclusive: ECON 7200

ECON 7300 Directed Special Studies in Economics 3 cr
Intensive study of advanced work in a selected field of economics. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ECON 7430 Advanced Theory of Resource Economics 3 cr
Economic theory of the development and management of natural resources. Application of capital theory, investment theory, the theory of externalities and decision-making theory to resource utilization and management. A strong background in microeconomics is required. Also offered as ABIZ 7430 by the Department of Agribusiness and Agricultural Economics.
Equiv To: ABIZ 7430

ECON 7510 Advanced Monetary Macroeconomics 3 cr
Mainstream and other theories of how money matters to macroeconomics, theory and practice of policy rules for both monetary and other stabilization policy tools.

ECON 7540 Advanced History of Economic Thought 3 cr
Detailed study of a selected topic, or a selection of related topics, in the history of economic thought. Topic(s) vary from year to year, and are normally related to the research interests of the instructor(s) and/or students.

ECON 7610 Approaches, Methodologies and Techniques in Economic History 3 cr
A review of methodologies, approaches, techniques, and contemporary controversies in economic history.

ECON 7630 Theory of International Trade 3 cr
Theories of trade flow; trade and income distribution; economic growth and changes in trade flows; instruments of trade intervention; international labour and capital movements; and economic integration.

ECON 7640 International Money and Finance 3 cr
Analysis of the theory of international money and finance. Assessment of existing international institutions dealing with money and finance. Theory, rationale and evaluation of structural adjustment policies.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECON 7630, or both the former ECON 7500 and ECON 7510, or permission of instructor.

ECON 7650 Advanced Macroeconomic Theory 1 3 cr
A review of contemporary macroeconomic theories and their applications; analysis of static equilibrium and disequilibrium models; exploration of such models' implications for cyclical behaviour and for policymaking.

ECON 7660 Advanced Macroeconomic Theory 2 3 cr
Analysis of cyclical models and of equilibrium growth models, and a review of contemporary theories of stabilization policy.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECON 7650.

ECON 7670 Advanced Macroeconomic Topics 3 cr
Not currently offered.

ECON 7690 Structuralist Theories of Development 3 cr
Study of structuralist classical Marxist and Neo-Marxist theories of development and underdevelopment. Appraisal of the development strategies which follow from the various theories.

ECON 7722 Advanced Microeconomic Theory I 3 cr
This course will cover topics in theories of consumer demand, production and cost, distribution, market equilibrium, market organization, general equilibrium and welfare. Students may not hold credit for both ECON 7722 and the former ECON 7720.
Equiv To: ECON 7720

ECON 7732 Advanced Microeconomic Theory II 3 cr
This course will cover topics in game theory. Static and dynamic games with complete or incomplete information will be studied. Topics such as market failure arising from asymmetric information, firm behavior in oligopolistic markets, auctions, signaling, free riding, externalities, and public goods will be discussed. Students may not hold credit for both ECON 7732 and the former ECON 7730.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECON 7722.
Equiv To: ECON 7730

ECON 7790 Advanced Labour Economics 3 cr
A review of the theoretical and empirical foundations of modern labour economics.

ECON 7940 Production Economics 3 cr
Development of static microeconomic theories of the firm, functional forms, aggregation issues, productivity analysis, risk and uncertainty and in introduction to dynamics. The following are emphasized: a rigorous treatment of the models using duality; a critical understanding of the limitations and possibilities for generalizing the models; and relevance of the models for empirical research, especially in agriculture. Also offered as ABIZ 7940 by the Department of Agribusiness and Agricultural Economics. May not be held with ABIZ 7940 or ABIZ 7130.
Equiv To: ABIZ 7940

ECON 7950 Advanced Agricultural Demand Analysis 3 cr
Critical evaluation of economic theory as applied to agricultural demand. Topics include demand systems; equilibrium; product transformation over time, place and form; and price analysis. Also offered as ABIZ 7950 in the Department of Agribusiness and Agricultural Economics. Students may not hold credit for ECON 7950 and any of: ABIZ 7950 or the former ECON 7900 or the former ABIZ 7100.
Equiv To: ABIZ 7100, ABIZ 7950, ECON 7900

Education Admin, Fndns & Psych (EDUA)

EDUA 7010 Educational Administration as a Field of Study and Practice 3 cr
An overview of educational administration, focusing on a review of some of the main intellectual traditions in the study of educational administration and on an analysis of some of the forces which shape administrative practice. Not to be held with EDUA 7011.
Equiv To: EDUA 7011

EDUA 7020 Politics of Education 3 cr
A review of the political features of educational organizations, with emphasis on value systems, community power structures, local government, and political change. Not to be held with EDUA 7021.
Equiv To: EDUA 7021

EDUA 7030 Educational Finance 3 cr
Study of economic and financial aspects of education, with emphasis on costs and analysis of expenditures; sources and types of revenue; productivity and efficiency, planning and budgeting. Not to be held with EDUA 7031.
Equiv To: EDUA 7031

EDUA 7040 Legal Aspects of Education 3 cr
Studies of legal issues in education. Not to be held with EDUA 7041.
Equiv To: EDUA 7041

EDUA 7050 Theoretical Perspectives on Educational Administration 3 cr
A study of the main currents of organization theory and administrative thought and their implications for the study and administration of educational organizations. Not to be held with EDUA 7051.
Equiv To: EDUA 7051

EDUA 7060 Organizational Planning and Development in Education 3 cr
A review of approaches to planning and development in education. Major emphasis is placed on the systematic development of educational organizations. Not to be held with EDUA 7061.
Equiv To: EDUA 7061

EDUA 7070 The Analysis of Educational Organizations 3 cr
The application of methods of organizational analysis to educational institutions. Not to be held with EDUA 7071.
Equiv To: EDUA 7071

EDUA 7082 Indigenous Instructional Leadership 3 cr
This course will provide students with extended academic knowledge of Canadian indigenous education in the context of educational administration. With a focus upon the responsibilities for instructional leadership that are borne by school and school district administrators in indigenous school contexts, this course will explore topics that are relevant to in-service teacher development and school improvement. May not be held with EDUA 7100 when titled "Indigenous Instructional Leadership".

EDUA 7090 Seminar in Administrative Problems in Education 3 cr
Application of theoretical concepts in field situations. Not to be held with EDUA 7091.
Equiv To: EDUA 7091

EDUA 7100 Topics in Educational Administration (Readings) 1 3 cr
A readings course in topics of significance to educational administration.

EDUA 7110 Topics in Educational Administration (Field) 2 3 cr
A projects and field study course in topics of significance to educational administration.

EDUA 7113 Éducation pour un avenir viable 3 cr
Exploration en profondeur de la pédagogie et de l'apprentissage dans le domaine de l'éducation pour un avenir viable. Étude de la théorie et des pratiques reliées à ce domaine. Expérimentation de stratégies innovatrices qui ont pour but d'intégrer l'éducation à l'environnement dans les contextes éducatifs et communautaires.

EDUA 7200 Philosophy of Education 3 cr
A study of the philosophic foundations of education. Emphasis will be given to various schools of philosophic inquiry as they relate to education and to contemporary philosophy of education issues.

EDUA 7210 Educational Sociology 3 cr
An examination of the relationship between education and society, with particular attention to ethnicity, family, and socio-economic status and to the role of the school in the socialization process in the Canadian context. Not to be held with EDUA 7211.
Equiv To: EDUA 7211

EDUA 7230 Social Criticism in Education 3 cr
A critical examination of education, giving special attention to various perspectives which challenge conventional interpretation of education and schooling.

EDUA 7240 Values in Education 3 cr
Examines the place of values in education. It explores the notion of values, its pervasiveness in education, the approaches to values in education, and the trends and issues related to values in education. Not to be held with EDUA 7241.
Equiv To: EDUA 7241

EDUA 7250 Comparative Education 3 cr
An analysis of educational systems and problems in selected environments in terms of social, political, economic, cultural and other contexts.

EDUA 7270 Seminar in Cross-Cultural Education 1 3 cr
A critical analysis of the social theories and research which form the basis of cross-cultural education. Not to be held with EDUA 7271.
Equiv To: EDUA 7271

EDUA 7280 Seminar in Cross-Cultural Education 2 3 cr
A critical analysis of the approaches and research in cross-cultural education. Not to be held with EDUA 7281.
Equiv To: EDUA 7281

EDUA 7300 History of Canadian Education from 1867 3 cr
A study of the historical development of education in Canada from 1867 to the present.

EDUA 7330 Topics in Educational Foundations (Readings) 1 3 cr
A reading and research course in topics of significance to educational foundations.

EDUA 7340 Seminar in Educational Thought 3 cr
Intensive studies of the works of selected educational theorists.

EDUA 7402 Development of Adult Education and Post-Secondary Education 3 cr
A survey structures, theory, philosophies, and curricula of educational systems for adults, as affected by cultural, political, religious, theological and institutional contexts both national and internationally. Not to be held with the former EDUA 7400 or the former EDUA 5400.
Equiv To: EDUA 5400, EDUA 7400

EDUA 7404 Lifelong Learning in Educational Settings 3 cr
Explores recent issues, research, and theories about learning across the lifespan, with emphasis on adulthood, as learning is affected by cultural, political, and interpersonal contexts.

EDUA 7406 Topics in Adult and Post-Secondary Education 3 cr
This course provides an opportunity for students to investigate methodologically, in depth, significant trends and topics from both the scholarly literature of adult and post-secondary education and internet resources.

EDUA 7408 Seminar in Adult and Post-Secondary Education 3 cr
This course entails an examination of topical issues in adult education and post-secondary education with particular focus on scholarly developments in Canada and Manitoba, based on student interests and thesis or comprehensive examination foci, with learning process instructor facilitated.

EDUA 7412 Governance of Post-Secondary Education 3 cr
This course examines the history of the governance of post-secondary institutions, the roles of stakeholders in governance, and factors influencing governance in post-secondary institutions today.

EDUA 7414 Seminar in the Administration of Post-Secondary Education 3 cr
This course has as its focus the application of theoretical concepts of field situations. It will explore administrative skills and their application to selected issues of post-secondary education.

EDUA 7420 Program Planning in Adult Education 3 cr
Introduction to factors affecting the planning of programs for adults. Examination of various planning models in relation to principles of adult education. A consideration of theory with major emphasis on directions for planning a program for adults. Local examples will be used.

EDUA 7510 Seminar in Current Issues in Counselling 3 cr
Focus on research, theoretical and professional developments; critical contemporary issues; and specific social problems in counselling. Not to be held with EDUA 7511.
Equiv To: EDUA 7511

EDUA 7520 Practicum Seminar in Counselling 6 cr
Supervised experience in individual and/or group counselling. Attention is given to analysis of case studies using audio- and video-tapes. A minimum of 180 hours of counselling experience in placement situations is required. This course is evaluated on a pass/fail basis. May not be held with EDUA 7521.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: EDUA 5480 (P) (or EDUA 5481 (P)) and EDUA 5520 (C+) and EDUA 7550 (C+) (or EDUA 7551 (C+)), and permission of the instructor.
Equiv To: EDUA 7521

EDUA 7530 Group Counselling: Theory and Practice 6 cr
Study of theories, rationale, objectives, and research. Acquisition of an experiential understanding of group work through participation in class activities. Development of leadership skills in group counselling by conducting counselling groups under supervision. Not to be held with EDUA 7531.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDUA 5540 or EDUA 5541 (C+) and EDUA 5480 or EDUA 5481 (P).
Equiv To: EDUA 7531

EDUA 7540 Programs in Career Development 3 cr
A practical course designed for helpers wishing a wider knowledge of career development programs. Participants will investigate and evaluate a wide variety of career counselling techniques and programs and will develop specific, innovative programs to meet the needs of their future counsellors. Not to be held with EDUA 7541.
Equiv To: EDUA 7541

EDUA 7550 Theories of Counselling 3 cr
The objectives of counselling, assessment of counselling outcomes, theories of personality and counselling. Not to be held with EDUA 7551.
Equiv To: EDUA 7551

EDUA 7560 Cross-Cultural and Diversity Counselling 3 cr
A study of the influences of multiculturalism and diversity on counselling as a professional activity, addressing counsellor self-awareness, identity, beliefs and skills. Not to be held with EDUA 7740 titled Cross-Cultural Counselling or EDUA 7561.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: EDUA 5500 and EDUA 5480.
Equiv To: EDUA 7561, EDUA 7740

EDUA 7602 Seminar in Inclusive Education 6 cr
A forum for the discussion of topics related to inclusive educational issues. The overall goal of the course is to challenge students thinking about inclusive education, reflect on their own practices in light of the topics covered in class, and to encourage growth in their inclusive pedagogic practices. Opportunities will be provided for students to examine issues related to their particular professional and scholarly needs. May not be held with the former EDUA 7600 or EDUA 7601.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or corequisite: 18 credit hours in Inclusive Education at the 5000 level or equivalent (C+).
Mutually Exclusive: EDUA 7600, EDUA 7601

EDUA 7610 Behavioural Issues in Educational Settings 3 cr
This course is designed to give teachers and school counsellors the necessary theoretical background as well as the practical tools to implement programs for children in conflict. May not be held with EDUA 7611.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or co-requisite: EDUA 5602 (or the former EDUA 5600) or EDUA 5601 or EDUA 5680 or EDUA 5681 (C+).
Equiv To: EDUA 7611

EDUA 7630 Advanced Assessment and Instruction in Inclusive Education 3 cr
This advanced-level course addresses diagnostic/prescriptive techniques used to ameliorate learning and behavioural problems in inclusive education. Emphasis is on the development and analysis of related instructional delivery systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or co-requisite: EDUA 5632 (or the former EDUA 5630) or EDUA 5631 (C+).

EDUA 7652 Field Experience in Inclusive Education 6 cr
A minimum of 200 hours of supervised placement in an inclusive education setting. Scheduled seminars facilitate directed study and discussion. This course is evaluated on a pass/fail basis. May not be held with the former EDUA 7650 or EDUA 7651.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: 18 credit hours at the 5000 level in Inclusive Education or its equivalent (C+).
Mutually Exclusive: EDUA 7600, EDUA 7601

EDUA 7710 Development in Learning Environments 3 cr
Explores recent advances in developmental psychology as they apply to learning in classrooms and other education-related settings. Emphasis will be given to cognitive change, but motivation and social skill development will also be considered as they relate to cognitive development.

EDUA 7712 Working with Family, School and Community Systems 3 cr
Examining the effective development and implementation of support teams in school settings to establish collaborative and respectful partnerships between families, schools, and specialists. Not to be held with EDUA 7740 titled Working with Family, School, & Community Systems.
Equiv To: EDUA 7740

EDUA 7720 Psychology of Classroom Learning 3 cr
Explores recent advances in cognitive research as they apply to classroom learning and to other education-related settings. Emphasis will be given to information processing theory, situated cognition, and the development of expertise, as they relate to educational processes, especially in classrooms. Not to be held with EDUA 7721.
Equiv To: EDUA 7721

EDUA 7740 Topics in Educational Psychology 1 3 cr
A reading and research course in topics of significance to educational psychology.

EDUA 7743 La pédagogie universelle 3 cr
Nature et fondements de la pédagogie universelle. Thématiques de la gestion de la diversité en éducation et inclusion scolaire. Approfondissement du concept de la pédagogie universelle: fondements, principes de flexibilité, lignes directrices, modèles de planification de l'enseignement et modalités d'évaluation.

EDUA 7750 Topics in Educational Psychology 2 3 cr
A reading and research course in topics of significance to educational psychology.

EDUA 7751 Sujets particuliers en psychologie de l'éducation 2 3 cr
Lecture et recherche sur des sujets d'importance en psychologie de l'éducation.

EDUA 7760 Interview Techniques with Children and Adolescents 3 cr
Focuses on the principles/processes of interviewing and counselling children, adolescents, parents, and school personnel by integrating theory and practice. Pre or co-requisites can be one of the following: EDUA 7550, PSYC 7030, PSYC 7070, PSYC 7022, PSYC 7080, SWRK 6050, SWRK 7290, SWRK 7310.
Equiv To: EDUA 7761

EDUA 7810 Evaluating Educational Programs 3 cr
An introduction to current approaches to evaluating educational programs. A review of various evaluation methods/approaches, along with consideration of specific design, ethical, consulting and political issues will be the main focus of this course. Specific skills to be developed are the implementation of educational evaluations, data collection and analysis, and final report writing.

EDUA 7830 Engaging with Research in Education 3 cr
This research course is intended to prepare graduate students to locate and critically read various genres of empirical research studies in the field of education. Students will identify and consider the quality of key elements of published empirical studies including: theoretical and conceptual frameworks, literature review, research methodology and methods, findings, significance, and limitations.

EDUA 7840 Qualitative Research Methods in Education 3 cr
An introduction to qualitative research methods. While the theoretical underpinnings of qualitative research will be discussed, emphasis is placed on learning to conduct a study including design, collecting and analyzing data, and research ethics. May not be held with EDUA 7841.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDUA 7830 (C+).
Equiv To: EDUA 7841

EDUA 7850 Design and Analysis of Educational Research (Quantitative) 3 cr
A study of the use of quantitative methods of analyzing educational research data. Descriptive and inferential procedures commonly used in educational research will be discussed and students will learn to use statistical packages. The course will also address when it is appropriate to employ quantitative designs and present common designs and their associated analyses.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDUA 7830 (C+).

EDUA 7860 Advanced Topics in Educational Research 3 cr
An introduction to qualitative research methods. While the theoretical underpinnings of qualitative research will be discussed, emphasis is placed on learning to conduct a study including design, collecting and analyzing data, and research ethics. May not be held with EDUA 7841.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDUA 7830 (C+). Equiv To: EDUA 7841
Equiv To: EDUA 7841

EDUA 7870 Measurement and Evaluation in Schools 3 cr
An advanced study of the principles of measurement and evaluation and their application to teaching and learning in schools. Current issues in measurement and evaluation, including alternative forms of classroom assessment and standard setting, will be discussed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDUA 5810 or EDUA 5811 (C+) or equivalent, or consent of instructor.

Education Curric, Tchg, & Lrng (EDUB)

EDUB 7000 Contemporary Perspectives and Practices in Arts Education 3 cr
A study of current and emerging perspectives and practices in arts education with an emphasis on recent theory and research as it relates to arts teaching and learning for social justice

EDUB 7002 Curriculum Leadership through Community Art 3 cr
An exploration of curriculum leadership as a socially responsible problem-solving process and the role of community art in advancing democratic and holistic values in a variety of educational environments. Students will reflect upon related historic and contemporary curriculum movements, how these inform social change, and the implications for leadership that promotes democracy and social justice.

EDUB 7010 Seminar in Art Education 1 3 cr
An examination of the major historical, philosophical, psychological and socio-cultural foundations of art education. The study of major developments in each of these areas will form a basis for understanding current theory and practice.

EDUB 7020 Seminar in Art Education 2 3 cr
The study of the methodology, content and problems of art education research, curriculum development and practice. Students will explore research methodology and curriculum design through individualized projects related to classroom practice.

EDUB 7030 The Arts in Education 3 cr
An examination of the role of the arts in general education. Emphasis will be placed on knowledge of the role of perception, aesthetic valuing and cognition in arts education, and application of this understanding and knowledge to educational practice.

EDUB 7040 Seminar in Educational Drama 3 cr
A critical examination of the literature and current research in educational drama. Consideration will be given to the philosophy, theory, and practice of drama in the classroom, and the evaluation of programs.

EDUB 7050 Seminar in Educational Theatre 3 cr
A critical examination of the literature and current research in educational theatre. Consideration will be given to the philosophy, theory, and practice of theatre in the school setting, and to the evaluation of programs.

EDUB 7060 Seminar and Practicum in Clinical Diagnosis and Remediation 6 cr
A thorough study of the etiology, diagnosis, and treatment of complex reading disabilities; practical experience under supervision in diagnosing reading problems and in prescribing, treating, interpreting, and reporting findings.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDUB 5400 (C+).

EDUB 7070 Classical Research in Reading 3 cr
A critical review, analysis, and synthesis of classical research studies in the psychology, psycholinguistics, sociology, and pedagogy of reading. Students may not hold credit for EDUB 7071.
Equiv To: EDUB 7071

EDUB 7090 Seminar in Reading Processes 3 cr
A critical examination of theories and models of reading; a thorough study of the reading processes in relation to language, vision, hearing, neurological development, cognition and motivation.

EDUB 7100 Language and Literacy Curriculum Inquiry in the Early Years 3 cr
A study of language and literacy curriculum in the early years of schooling. Participants will identify and examine issues and problems arising out of theory, research, and curriculum practices in early years classrooms. Participants will have the opportunity to develop and pursue a curriculum project in accordance with their professional research interests.

EDUB 7110 Research in Language and Literacy Development 3 cr
An exploration of language and literacy development issues of professional interest to teachers. Participants will critically analyze language/literacy development theories, published research, and classroom observations. Opportunities will be created for participants to conduct their own language/literacy development inquiry in an educational setting. May not be held with EDUB 7111.
Equiv To: EDUB 7111

EDUB 7120 Curricular Issues in English Language Arts Education 3 cr
This course will address a number of problematic issues in the development and implementation of school-based instruction in English language arts through critically considering the relationship of current theory, research and pedagogy.

EDUB 7130 Becoming Writers: Power, Place and Pedagogy in Teaching Writing 6 cr
This course invites participants to engage in becoming stronger writers and more effective teachers, advocates, and researchers of writing. The course is designed with the premise that to become better teachers of writing (at any level), teachers must become writers themselves. This is an intensive and experiential course that affords opportunities to write; participate in writing groups; delve into professional literature in writing craft, research, theory and pedagogy; interact with guest speakers; explore thematic and social justice inquiries in writing, and design and lead a teaching demonstration. The course is open to all, regardless of prior writing experience. May not be held with EDUB 7142 or the former EDUB 7340 when titled "Writing Workshop: Writing for/as Human Rights" or the former EDUB 7350 when titled "Curriculum Development: Writing for/as Human Rights".
Mutually Exclusive: EDUB 7142, EDUB 7340, EDUB 7350

EDUB 7142 Topics in Curriculum, Teaching, and Learning 3 cr
An advanced study of practices, ideas, and theories in curriculum, teaching and/or learning. The specific topics will vary to reflect changing priorities, trends, and interests in the field of curriculum studies. Students can earn multiple credits for this course only when the topic subtitle is different.

EDUB 7150 Seminar in Reading and Response to Literature 3 cr
This course is designed to familiarize students with the historical and philosophical trends in reading and response to literature; it will survey major developmental reading and literary response trends, examine the epistemological assumptions associated with those developments and explore the developing thought in how students process written texts, in particular, literary tests. The course will also examine curricular implications in reading and literary response.

EDUB 7160 Language Teacher as Researcher 3 cr
The purpose of this course is to investigate the characteristic parameters of teachers as researchers in the context of their own classroom. Three fundamental principles provide a curricular perspective to guide the participants: voice, conversation, and community. With this perspective, the language teacher engages in classroom inquiry with the goal of understanding language and teaching through the learners as curricular informants. May not be held with EDUB 7161.
Equiv To: EDUB 7161

EDUB 7180 Research in Written Composition 3 cr
A critical analysis of research and research methods in written composition process and pedagogy. Consideration will be given to classic studies, historical development, current trends and research, and evaluation procedures as they apply to the study and teaching of writing. May not be held with EDUB 7181.
Equiv To: EDUB 7181

EDUB 7190 Research in Language for Learning 3 cr
A critical study of the research literature in how language can support learning in all areas of schooling. The course will focus on the role of language in supporting learning in all subject areas and will specifically investigate the research about the role of talking, reading, and writing as tools for learning. May not be held with EDUB 7191.
Equiv To: EDUB 7191

EDUB 7210 Seminar in E.S.L. Theory and Practice 3 cr
Opportunity will be given to examine critically the major theories and methodologies used in E.S.L. instruction and research.

EDUB 7212 Critical Applied Linguistics in a Global Context 3 cr
We will examine the role of English comparatively and internationally in a variety of educational systems and regimes, relating the micro-relations of applied linguistics to the macro relations of society, exploring the roles of critical theory in language teaching and learning, and developing self-reflexivity as scholars in second language education.

EDUB 7220 Research Issues and Application in TESL (Teaching English as a Second Language) 3 cr
This course focuses on a survey of ESL and language development research issues, procedures, and findings. This research review will serve as the basis for students to plan individual research and conduct a pilot study.

EDUB 7290 Curriculum Research in Early Years: Young Children and Social Semiotics 3 cr
An investigation of the social nature of learning and children's use of semiotic systems (language, art, music, dance, drama, and mathematics) as ways of knowing in the Early Years (K-4) classroom. Participants will conceive, organize, and conduct a research project that allows them to develop an understanding of children's use of one or more semiotic systems within a curriculum context.

EDUB 7330 Inquiry in Curriculum and Instruction 3 cr
An examination of the issues involved in critiquing and synthesizing inquiry in curriculum and instruction studies in the humanities and social sciences. The course will also introduce students to the variety of ways in which inquiry may be conducted in instructional settings and will focus on how the research on curriculum and instruction can be validly synthesized across studies.

EDUB 7416 Teaching and Learning in Post-Secondary Education 3 cr
An in-depth study of teaching and learning in post-secondary education contexts grounded in current theoretical, research and pedagogical literatures.

EDUB 7420 Study of Teaching 3 cr
Views of teaching, paradigms, and methodologies for studying teaching and carrying out inquiries into teaching. May not be held with EDUB 7421.
Equiv To: EDUB 7421

EDUB 7450 Seminar in Educational Technology 3 cr
A review of current research in educational technology and a critical appraisal of recent technology in instructional development.

EDUB 7460 Information Technology and Education 3 cr
A theoretic study of information media and environments, their educational and societal impact, and their educational application.

EDUB 7470 Seminar in Mathematics Education 3 cr
An analysis of methods and materials in mathematics education, a review of research, and a critical appraisal of current curriculum development.

EDUB 7490 Theories of Teaching and Learning Mathematics 3 cr
An examination of theories of teaching and learning mathematics in K-12 and post-secondary settings including the roles of curriculum and assessment in these theories.

EDUB 7492 Recent Advances in Mathematics Education and Science Education 3 cr
An examination of recent advances in theory, research, policy and practice in mathematics education and science education in settings within schools and beyond. Social, cultural, ethical, human rights and sustainability dimensions of recent advances in mathematics education and science education will be considered. Opportunities to explore commonalities and intersections between mathematics education and science education as well as recent advances unique to either mathematics education or science education will be provided.

EDUB 7494 Processes and Practices in Teaching and Learning Science 3 cr
An analysis of science education instructional and learning perspectives encountered in current research and curriculum in this area. Emphasis will be given to current research in science instruction such as (but not exclusive to) argumentation, problem-based and project-based learning, technological design and problem solving, scientific inquiry in the laboratory, assessment and sustainability.

EDUB 7500 Seminar in Science Education: Philosophical and Theoretical Foundations 3 cr
An analysis of science education foundations, from epistemological and theoretical perspectives encountered in current research and historical and contemporary curriculum developments in this area. Emphasis will be given to Nature of Science (NOS), and discussions about the normative and cultural aspects of mainstream (Western) science grounded in current research and theory in science education.

EDUB 7510 Educational Problems and Advanced Methods in Health and/or Physical Education 3 cr
An examination of the relationship of research to educational practice in the teaching of health and/or physical education.

EDUB 7520 Contemporary Curricula in Health and/or Physical Education 3 cr
An examination of principles and content of health and/or physical education curricula and programs. Logistical and social-political factors associated with implementation will be examined.

EDUB 7530 Curriculum Development and Implementation in Language and Literacy 3 cr
A study of historical antecedents - issues, theory and research - in relation to both the reading and writing curriculum contrasted with current structuralist, poststructuralist and deconstructivist views of knowledge construction with emphasis on discourse synthesis, individual cognitive processes and social influences on literacy learning. Not to be held with EDUB 7531.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: A minimum of 3 credit hours of reading courses (C+).
Equiv To: EDUB 7531

EDUB 7540 Final Seminar in Curriculum, Teaching and Learning 3 cr
Seminar and workshop on processes and products in writing and defending an M.Ed. final inquiry paper. Both qualitative and quantitative research models will be acknowledged. Not to be held with EDUB 7541.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Minimum 24 credit hours completed in a comprehensive M.Ed. Program (C+).
Equiv To: EDUB 7541

EDUB 7542 Contemporary Approaches to Curriculum Theorizing 3 cr
An overview of current approaches to curriculum theorizing including decolonial/post-colonial, queer, ecological, aesthetic, and feminist perspectives.

EDUB 7544 Teacher Professional Development 3 cr
The course explores selected aspects of teacher professional development and critically considers the various contexts, discourses, and approaches of teacher learning and professional development. May not be held with EDUB 7142 or EDUB 7340 when titled "Teacher Professional Development".

EDUB 7546 Curriculum Leadership 3 cr
This course explores the meaning of curriculum leadership, related historic and contemporary curriculum movements, how these inform and relate to social change, and the implications for leadership that promotes democracy and social justice. May not be held with EDUB 7142 when titled "Curriculum Leadership".

EDUB 7548 Critical Perspectives of Identities of Children and Youth 3 cr
This course will explore historical, reconceptualist and postmodern theories of children and childhood. Students will critically consider the ways in which children and youth have been constructed over time; including the historical, political and epistemological influences and implications of these constructions, and the educational, political and methodological effects of particular constructions of identity.

EDUB 7550 Curriculum: Historical Perspectives and Contemporary Implications 3 cr
Historical Developments of curriculum as a field of study and inquiry, including the philosophical, social, political, and cultural contexts of curriculum.

EDUB 7552 Critical Theory in Education 3 cr
A course tracing the theoretical lineage of critical theory, including the historical context and reception of authors associated with the Frankfurt School; and an exploration of the ways in which critical theory has changed over time, its application in education and pedagogy, and contemporary education contexts, practices, and theories. May not be held with EDUB 7142 when titled "Critical Theory in Education".

EDUB 7560 Theory and Practice of Curriculum Design and Development 3 cr
An examination of the theory and practice of the design, development, implementation and evaluation of curricula for K-12 and adult/post-secondary levels.

EDUB 7580 Social, Cultural, and Political Theories in Second Language Acquisition 3 cr
Examination of historical and contemporary theories, research, and issues regarding social, cultural, and political approaches to the study of additional language learning and teaching.

EDUB 7590 Internationalization of Technical and Vocational Education and Training 3 cr
An exploration and critical evaluation of basic assumptions underlying the theories and values of globalization and the internationalization of technical and vocational education and training (TVET). Emphasis will be placed on the examination of how these theories and values influence institutions, programs, policies and practices in TVET.

EDUB 7600 Action Research in Education 3 cr
The study of the theory and practice of action and participatory action research in education including models, principles and practices, criteria for assessing quality, ethics, and modes of representation.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDUA 7830 (C+).

EDUB 7700 Contemplative, Holistic, and Integrative Education: The Self 3 cr
This course provides opportunities to study historical and contemporary theories and accompanying practices of self-awareness, self-knowledge, and self-development within and across the fields of contemplative, holistic, and integrative education.

EDUB 7710 Contemplative, Holistic, and Integrative Education: The Social, Cultural, and Ecological 3 cr
This course provides opportunities to study how historical and contemporary theories and accompanying practices of contemplative, holistic, and integrative education impact social, cultural, and ecological life.

EDUB 7720 Approaches to Contemplative, Holistic, and Integrative Curriculum and Pedagogy 3 cr
This course provides opportunities to study historical and contemporary approaches to curriculum, teaching and learning within and across the fields of contemplative, holistic, and integrative approaches to education.

EDUB 7730 Being an Educator in Contemplative, Holistic, and Integrative Education 3 cr
This course provides opportunities to study historical and contemporary approaches to being an educator within and across the fields of contemplative, holistic, and integrative approaches to education.

EDUB 7740 Recent Topics in Research in Contemplative, Holistic, and Integrative Education 3 cr
This course provides opportunities for advanced studies in contemplative, holistic, and integrative education. The specific topics will vary to reflect changing and emerging priorities, trends, and interests in the field of studies. Students can earn multiple credits for this course only when the topic subtitle is different.

EDUB 7750 Seminar in Studies in Contemplative, Holistic, and Integrative Education 3 cr
This seminar course provides opportunities to study selected theories in and approaches to contemplative, holistic, and integrative education. The course will provide an overview of and provocations for thinking about contemplative, holistic, and integrative approaches to education through relevant readings, seminar discussions, and inquiry.

EDUB 7900 Critical Examination of Reconciliation in and through Education 3 cr
In this course, participants will critically examine the historical, social, cultural, political, and ethical contexts for (re-)conciliation in Canada, and the role that education can and should play in this journey. Participants will engage with a range of theories to understand those contexts, the role of education in (re-)conciliation, and participants' implication in such endeavours. May not be held with EDUB 5220 or EDUB 7142 when titled "Critical Examination of Reconciliation in and through Education".

EDUB 7910 Seminar in Indigenous (First Nations, Métis, Inuit) Education 3 cr
This seminar course provides opportunities to study different theories in and approaches to Indigenous (First Nations, Métis, Inuit) education.

EDUB 7930 First Nations, Metis, and Inuit Ways of Knowing in/for Curriculum, Teaching and Learning 3 cr
This course will examine Indigenous (First Nations/Metis/Inuit) knowledge, heritage, consciousness, and traditions and their use in education. Students will have the opportunity to study traditions, knowledges, practices and other cultural activities, and their potential incorporation into and/or confluence with curriculum, teaching, and learning. May not be held with EDUB 7142 where the title is "Indigenous Ways of Knowing in/for Curriculum, Teaching and Learning".

EDUB 7950 Indigenous Storytelling, Narrative and Storywork as Pedagogy 3 cr
An exploration of Indigenous (First Nations, Metis, and Inuit) storytelling, narratives, and storywork in/as Indigenous pedagogy within curriculum, teaching and learning. The relationships between oral and written traditions, and the use of Indigenous literary-texts within a range of topic areas will be reviewed. May not be held with EDUB 7142 where the title is "Indigenous Storytelling, Narrative and Storywork as Pedagogy

Education Ph.D. Courses (EDUC)

EDUC 7040 Current Issues in Mathematics Education 6 cr
An investigation of topics of current theoretical and practical significance in mathematics education. Students will be required to complete a series of explorations, typically involving observation or experimentation in the field, which will be the focus of discussion.

EDUC 7050 Doctoral Study in Education 3 cr
Directed study of contemporary research and theory in selected areas within the field of education. The content of this course will vary from year to year and will depend upon students' research interests.

EDUC 7060 Advanced Seminar in Educational Administration 1 3 cr
A study of alternative conceptions of educational administration, from its origins as a field to the present. Attention will be given both to historical and contemporary theories of administration. Limited to Ph.D. students and compulsory for Ph.D. students with a focus in educational administration.

EDUC 7070 Advanced Seminar in Educational Administration 2 3 cr
A consideration of some of the central problems of contemporary social theory and their relationship to the study and practice of educational administration. The course is limited to Ph.D. students and is compulsory for Ph.D. students with a focus in educational administration.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or co-requisite: EDUC 7060 (C+).

EDUC 7080 Language and Rhetoric Education 3 cr
Current theories of language with a particular emphasis on concepts of education as discourse and instruction as a rhetorical activity.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission into the Ph.D. program in Language and Literacy Education.

EDUC 7090 Language Arts Curriculum 3 cr
How current research, scholarship and theorizing in the areas of language, literature and curriculum studies can assist in developing fresh approaches to reconceiving the nature and purpose of the language arts curriculum as a linguistic, political and cultural enterprise.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission into the Ph.D. program in Language and Literacy Education.

EDUC 7100 Reading Education 3 cr
Current trends, curricular issues and new concerns in reading education including the continuing tension between traditional and progressive ideologies. Identifies, from an historical perspective, what has changed, what has not and why; reflects on what is known and what to study; and sets a research agenda for the study of literacy.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission into the Ph.D. program in Language and Literacy Education.

EDUC 7110 Doctoral Seminar in Science Education 3 cr
An exploration of current research, scholarship and thinking in science education as exemplified by key themes and current issues related to science and science education.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission into the Ph.D. program in Science Education.

EDUC 7120 Current Issues in Science Education 3 cr
An examination of current issues in science education by way of selected topics tailored to individual students' programs and interests.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission into the Ph.D. program in Science Education.

EDUC 7130 Language and Identity in Second Language Contexts 3 cr
An exploration of linguistic and cultural issues arising from the internationalization of English as a second language (ESL) teaching and learning, including current research of linguistic imperialism, linguistic human rights, cultural hybridization, sexual politics, and the feminization of speech.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDUB 7210 (C+) or permission of instructor.

Electr. and Computer Engin. (ECE)

ECE 7010 High Voltage Techniques and Insulation Design Criteria 3 cr
Laboratory generation and measurement techniques related to ac and dc high voltages, conventional and steep front high voltage pulses, composite voltages and pulsed currents. Charge measurements. Test techniques for assessing insulation quality and life.

ECE 7020 Power Transmission Lines: Phenomenon and Insulation Design 3 cr
High voltage dc, ac and hybrid transmission line corona modes, electrostatic and ionized field calculations, field effects of overhead transmission lines. Surge propagation including corona effect. Transmission line insulation design to withstand normal/abnormal voltages and conditions. Modern and conventional arrestors. Principles and practice of insulation coordination.

ECE 7030 Advanced Electrical Machines 3 cr
Magnetically-coupled circuits, energy conversion principles, field generation in ac machines, windings and inductances, reference frame theory, dc machine and dc drives, scalar control of induction machines, vector control of induction machines, drives for special machines.

ECE 7040 Signal and Data Compression 3 cr
The course presents the theory of signal and data compression with their applications in engineering, including lossless compression (Shannon-Fano, Huffman, arithmetic and dictionary) and lossy compression, including scalar and vector quantization. References to sub-band and transform coding (wavelets and fractal) and analysis-synthesis coding will be made.

ECE 7050 Switching and Automata Theory 3 cr
The course presents basic material in discrete mathematics and the theory of switching circuits. It provides electrical and computer engineering students with a firm basis in the modern theory of logic design, and illustrates some applications through formal characterization of combinational functions and sequential machines, using contemporary techniques for the automatic synthesis and diagnosis of digital systems.

ECE 7060 Power system Protection 3 cr
Philosophy of power system protection; Typical protection schemes; Instrument transformers; Protection hardware and application; Protection relay testing techniques; Software models of relays and their use in simulation studies.

ECE 7070 Power System Analysis 3 cr
Power system operation; load flow analysis; transient stability modeling and simulation using the classical model; detailed machine models for transient stability analysis, modeling of exciters, governors, and FACTS devices for transient stability analysis; methods of transient stability analysis; voltage stability concepts and assessment.

ECE 7072 Advanced Power Electronics 30 cr
AC/DC and DC/DC converters, switching functions, voltage source converters, advanced PWM techniques, analytical modeling and simulation, control system design, applications of power electronics in motor drives and power systems, additional topics of current interest.

ECE 7076 Advanced Electric Machines and Drives 3 cr
Magnetically-coupled circuits, energy conversion principles, field generation in ac machines, windings and inductances, reference frame theory, dc machine and dc drives, scalar control of induction machines, vector control of induction machines, drives for special machines.

ECE 7170 Queueing Systems for Telecommunications 3 cr
Applied stochastic models for queuing systems; analysis of queueing models using matrix-analytic methods and also traditional transform based approaches. Course will focus on applications; how to develop models that represent real communication network problems and how to analyze them.

ECE 7180 Embedded Systems Engineering 3 cr
A Structured approach to the design of modern digital systems is presented with specific emphasis on embedding computer applications. Topics will include the formal methodology of digital design together with selected topics from the current research literature

ECE 7190 Micromachining and MEMS Technology 3 cr
The course focuses on micromachining and micro-electro-mechanical systems (MEMS). Topics include microfabrication technologies, microactuators, and microsensors. Applications to optical, electrical, mechanical, chemical, and biological systems are discussed.

ECE 7200 Advanced Wireless Communication 3 cr
The course covers several advanced issues in wireless communication networks. Topics of study will include trends and future of mobile computing, advanced wireless technologies, multimedia wireless LANs, wireless ad hoc networks, energy mgmt, channel coding, privacy issues in wireless networking.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Either ECE 4250 or ECE 4700.

ECE 7202 Cognitive Wireless Networks 3 cr
The course will address both the theoretical concepts and system-level implementation issues for cognitive wireless networks. The topics covered will include information-theoretic analysis of cognitive radio systems, challenges and issues in designing cognitive radio systems, architectures and protocols for cognitive wireless networks, distributed adaptation and optimization methods, channel allocation cognitive machine learning techniques, interoperability issues, cross-layer optimization of cognitive radio systems, and applications of cognitive radio networks.

ECE 7204 Queueing Systems for Telecommunications 3 cr
Applied stochastic models for queueing systems; analysis of queueing models using matrix-analytic methods and also traditional transform-based approaches. Course will focus on applications; how to develop models that represent real communication network problems and how to analyze them.

ECE 7210 Fractal and Chaos Engineering 3 cr
This course presents the general theory of fractals and their applications in engineering, including fractal modelling of complex phenomena, such as dielectric discharges, and fractal image compression. It also relates fractals to chaos and dynamics.

ECE 7220 Topics in VLSI Test and Fault Tolerance 3 cr
Faults and fault models for VLSI. Test generation algorithms. Design for testability: scan design for sequential circuits; built-in test; testable PLA design. Totally self-checking logic. Fault tolerance in VLSI: yield and performance enhancement through redundancy. System level diagnosis: applications to VLSI processor arrays.

ECE 7230 Artificial Neural Circuits and Networks 3 cr
Examination of electronic neural networks and related computational systems, both from a circuit theory and from a system-theory perspective. Digital and analog VLSI implementations of neural systems are presented and compared. Connections with other systems from physics, biology and computer science are made.

ECE 7240 Signal Theory 3 cr
Representation and analysis of deterministic signals: Continuous and Discrete; Random processes and spectral analysis; Bandlimited signals and systems.

ECE 7250 Information Theory and Applications 3 cr
Development of information theory and the engineering implications for the design of communication systems and other information handling systems.

ECE 7260 Broadband Communication Networks 3 cr
This course provides fundamentals for designing and analyzing broadband communication networks. The major content includes: structure and organization of broadband communication networks, typical protocols and technologies applied in broadband communication networks mathematical network modeling, and performance analysis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Undergraduate level Probability Theory & Random Processes.

ECE 7270 Scattering and Diffraction of Electromagnetic Waves 6 cr
Formulation and analysis of scattering problems by classical methods. Radar cross section of smooth bodies by geometrical and physical optics. Diffraction by edges. Impedance and Leontovitch boundary conditions.

ECE 7280 Static Compensation in Power Systems 3 cr
Requirements for Static Compensation in Power Systems. The thyristor controlled reactor (TCR) and thyristor switched capacitor (TSC). Advanced GTO thyristor compensators. Operation and control of compensators. Load Compensation, filter design and specifications.

ECE 7310 Power System Transient Simulation 3 cr
Methods of Network Equation Formulation; Modeling of network nonlinearities and transmission lines; Modeling of electrical machines and controls.

ECE 7320 Sampled-Data Control Systems 3 cr
Analysis and design of discrete-time systems, compensation to improve stability and performance, introduction to digital logic control.

ECE 7330 Experimental Methods for Electronic Materials 3 cr
Methods for growing and analyzing electronic materials. Growth will include chemical vapour deposition, diffusion, and plasma processing. Analysis will include capacitance, voltage and current voltage techniques.

ECE 7370 Memory Devices and Systems 3 cr
Review of computing system architectures. Memory structures and implementations: static, dynamic, synchronous, asynchronous, single and multiport. Testability of memories. Smart memories. Memories for VLSI: configurable and reconfigurable. Case study of a CMOS self-synchronizing RAM.

ECE 7400 Neural Nets and Neurocomputing 3 cr
Foundations of neural networks. Basic architecture and different structures. Associative networks. Mapping networks. Spatio-temporal networks. Learning and adaptability. Supervised and unsupervised learning. Stability. Adaptive resonance networks. Self-organization. Examples of existing systems. Applications.

ECE 7410 Phased Array Antennas 3 cr
Linear and Planar Arrays Theory; Pattern Synthesis Techniques, Analysis and Design of Radiating elements, Phase Shifters and Beam-Forming Network; Scanning Techniques; Effect of phase, amplitude and mechanical errors on Array Performance.

ECE 7430 Experimental Methods of Microwave Engineering 3 cr
Methods for determining: scattering parameters; insertion, mismatch and return loss; cavity parameters. Detector and mixer performance characteristics. Power measurement. System noise determination. Antenna radiation pattern and gain measurements.

ECE 7440 Current Research Issues in Electrical Engineering 3 cr
Presentation of important research developments in the area of Electrical Engineering, selected to complement other established graduate courses. Approval of the head of the department is required to register for this course.

ECE 7450 High Frequency Integrated Circuit Design and Analysis 3 cr
Monolithic microwave integrated circuit fabrication and circuit design techniques. Analysis and modeling of microwave passive components and GaAs active devices. High frequency circuit simulation techniques. Basic circuit examples.

ECE 7460 Real time Process Engineering 3 cr
Identification, description, and analysis of the behaviour of systems of real-time communicating processes, and the application of real-time process algebras in the design of hardware and software systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: COMP 3430.

ECE 7540 Selected Topics of Solid State Electronics 3 cr
Homojunction and heterojunction phenomena; Gunn effect, organic semiconductors, properties of thin films, quantum electronic devices, space charge limited current devices, and newly developed solid state electronic devices.

ECE 7560 Principles of Signal Compression and Coding 3 cr
This course covers the fundamental principles underlying lossy coding of information signals for communication and storage: scalar and vector quantization; introduction to rate-distortion theory and high-rate theory; entropy-coded quantization; principles of predictive coding; transform coding and bit-allocation; trellis coding; channel-optimized quantization; applications.

ECE 7590 Telecommunication Networking 3 cr
This course will cover issues in the design and analysis of telecommunication networks and systems in terms of physical implementation, protocols, routing algorithms, management, software interfaces, and applications. Focus will be on high speed LAN, WAN and Telecommunication networks using a systems engineering perspective.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: although no prerequisites are required, either course ECE 4250 or COMP 4300 would be recommended.

ECE 7650 Current Research in Computer Engineering 3 cr
Presentation of important research developments in the area of Computer Engineering, selected to complement other established graduate courses in this area.

ECE 7660 Logic Problem Solving 3 cr
Introduction to declarative techniques in symbolic problem solving with emphasis on relational representations, query construction, and recursive formulations of knowledge structures in engineering.

ECE 7670 Optimization Methods for Computer-aided Design 3 cr
Constrained optimization of functions of several variables. Optimization methods suitable for the solution of engineering problems by modern digital computers. Both gradient and direct search methods are included.

ECE 7680 Dielectric Properties and Phenomena 3 cr
Elementary structure of matter, polarization, response of dielectrics to static and periodic fields, ionization and decay processes, electrical breakdown of gases, liquids, and solids.

ECE 7700 Nonlinear Systems Analysis 1 3 cr
Introduction to nonlinear phenomena; linearization; state-space methods - quantitative and qualitative; introduction to the principal methods of determining stability.

ECE 7720 Optimal Control 1 3 cr
Introduction to optimal control systems; topics will include statement of the control problem, controllability, calculus of variations, Pontryagin's Maximum Principle, and design of optimal controls.

ECE 7740 Physical Electronics 1 3 cr
Fundamental principles. Wave mechanics, statistical mechanics, structure of matter, free electron theory and electron emission, band theory of solids, electrical conduction, and transport phenomena.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECE 3600 or equivalent.

ECE 7750 Physical Electronics 2 3 cr
Properties of materials. Semiconductors, junction phenomena; ferroelectrics, magnetic materials, superconductivity, optical processes, effects of radiation.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECE 3600 and ECE 4190 or equivalent.

ECE 7780 Microwave Circuits 3 cr
Circuit properties of microwave transmission systems. Matrix representation and analysis of microwave networks, microwave junctions, resonators, and impedance matching networks.

ECE 7810 Solution of Fields by Numerical Methods 1 3 cr
Numerical integration, differentiation. Finite-difference solutions of the Poisson, Laplace and Helmholtz equations. Initial-value problems. The eigen problem. Examples chosen from electromagnetic, thermal, fluid-flow, stress, and other fields.

ECE 7880 Distributed Energy Generation 3 cr
Rationale for distributed generations (DG); Distributed electricity generation technologies (thermal and renewable); Availability of renewable energy resources; Technical and economic evaluation of DG projects; DG grid integration issues and interconnection standards; Microgrids.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Energy Systems I or equivalent course.

ECE 7890 Power System Control 3 cr
The application of modern systems engineering methods to power system problems.

ECE 7920 Human Physiology for Engineers 3 cr
The analysis and measurements of human physiological systems. Anatomical descriptions are limited to those required to support the functional analysis. Mathematical modeling is reinforced by analog and digital computer models.

ECE 7990 HVDC Transmission 1 3 cr
Rectifier-inverter fundamentals. Compounding and regulation. Grid firing control systems. Reactive power requirements. Ground return and electrode design. Transmission lines. Economics and efficiency.

ECE 8000 HVDC Transmission 2 3 cr
Protection. Harmonics: telephone interference. Corona: radio and television interference. Analytical methods. Conversion equipment, the use of solid devices. Selected topics from current literature.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECE 7990.

ECE 8010 Advanced Network Synthesis 3 cr
Mathematical treatment of various approximation techniques, matrix transformation methods applied to equivalent networks of minimum sensitivity or other criteria, theory of multivariable functions, lumped-distributed network synthesis.

ECE 8050 Topics in Microelectronics 3 cr
Equilibrium and non-equilibrium processes in semiconductors, properties of junctions and thin films, carrier transport phenomena, effects of traps, and selected topics pertinent to recent literature in microelectronics.

ECE 8110 Digital Systems Design 3 cr
Fixed-instruction-set microprocessor design; microprogramming, bit-slice based design; parallel processing and multiprocessing; applications to data acquisition, data logging, and data communications.

ECE 8130 Statistical Communication Theory 3 cr
Representations of random processes; signal detection and estimation techniques.

ECE 8140 Digital Communications and Coding 3 cr
Fundamentals of information theory; source and channel coding; digital modulation techniques.

ECE 8150 Digital Signal Processing 3 cr
Discrete-time linear system theory, digital filter design techniques, discrete Fourier transforms including FFT, discrete Hilbert transform, Walsh-Hadamard transforms high-speed convolution and correlation - techniques.

ECE 8190 Topics in Antenna Theory and Design 3 cr
Antennas as a boundary value problem, antenna parameters, analysis and synthesis methods, antenna measurements.

ECE 8200 Advanced Engineering Electromagnetics 3 cr
Solution of wave equation; special theorems and concepts, computer aided analysis.

ECE 8210 Power Electronic Circuits 3 cr
Thyristor properties, ac controllers, controlled rectifiers, dc to dc converters (choppers), and inverters. Permission of instructor required. Credit not to be held with ECE 4370.

ECE 8220 Digital Image Processing 3 cr
Digital representation of images. Two-dimensional operations and transforms. Image enhancement, restoration, and coding. Reconstruction from projections.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECE 3580 or equivalent desirable.

ECE 8230 Pattern Recognition and Scene Analysis 3 cr
Supervised and unsupervised learning techniques. Linear discriminant analysis. Scene analysis methods.

ECE 8270 Computer Communication Networks 3 cr
Overview of existing computer networks. Elements of queueing theory. Error, delay, cost and capacity analysis. Fixed assignment schemes. Packet and switched networks. Random access. Satellite networks. Hybrid protocols.

ECE 8280 Electromagnetic Field Modelling 3 cr
Coulombian and amperian models for polarized media and magnetized media; uniqueness theorems, formulation and classical methods of analysis of static, stationary and quasistationary field problems; modelling of electromagnetic fields in the presence of moving solid conductors; elements of relativistic electrodynamics.

ECE 8300 Computer Vision 3 cr
This course is an extension of ECE 8220 "Digital Image Processing." Techniques of image modelling, segmentation, texture analysis, matching and inference will be studied.

ECE 8310 Computer-Aided Design in Biomedical Engineering 3 cr
Representation of surfaces in space. 3D display methods and hardware. 3D boundary tracing and texture. Biosterometry and stereophotogrammetry in biomedicine. Some aspects of computer-aided manufacturing of prostheses and other topics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: an introductory course in computing or equivalent experience and one year of any physical, engineering or biological science.

ECE 8320 Advanced Topics in Power Systems 3 cr
Study of selected topics of recent advances in electrical power systems.

ECE 8360 VLSI Design Methodology 3 cr
Design of custom and semi- custom Very Large Scale Integrated (VLSI) circuits and systems including design for testability. Static and dynamic VLSI circuits; software design tools, layout, logic and timing simulation.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: ECE 2220 and ECE 4240 or equivalent.

ECE 8370 Topics in Biomedical Engineering 3 cr
A discussion of current topics in biomedical engineering. The latest in instrumentation, procedures and practices relevant both to clinical engineering and ongoing research are covered.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECE 4400 or consent of instructor.

ECE 8380 Reflector Antennas 3 cr
Mathematical analysis of common reflector antennas including effects of various types of feed structures.

ECE 8400 Intelligent Systems 3 cr
Continuation of ECE 7660 "Resolution Problem Solving," plan formation, default and temporal reasoning as applicable to engineering.

Engineering (ENG)

ENG 7010 The Engineering Design Process 3 cr
Consideration of the Engineering Design process and the logic upon which it is based. Explores both the history and possible future directions of the process from technical, social and environmental points of view.

ENG 7020 Topics in Engineering Practice 3 cr
This course will cover topics relating to the practice of professional engineering. The specific topics and a detailed outline will be available prior to the start of the registration period for the session in which the course will be offered. Students can earn multiple credits for this course only when the topic subtitle is different.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of the Director of the Centre for Engineering Professional Practice and Engineering Education.

ENG 7030 The Discipline of Engineering Education 3 cr
An in-depth examination of the discipline of engineering education, including its evolution, its characteristics, application, and theoretical developments.

ENG 7040 Foundations of Engineering Education Research 3 cr
Engineering education research conceptual and theoretical frameworks, methodologies and methods in both qualitative and quantitative paradigms, and the scholarship of teaching & learning in engineering education.

ENG 7510 Operational Excellence 3 cr
This course will provide students with a solid understanding of the fundamentals of operational excellence through the methodical application of engineering principles and theory to address real industry problems, grounded in the Plan-Do-Study-Act system. May not be held with either MECG 7600 or MECH 4342 where the topic was Operational Excellence. Good knowledge of Statistics is recommended.
Mutually Exclusive: MECG 7600, MECH 4342

English (ENGL)

ENGL 7030 Studies in American Literature 3 cr
A detailed study of an aspect of American Literature. Topics will vary from year to year. Not to be held with the former ENGL 7020. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7020

ENGL 7050 Studies in Canadian Literature 3 cr
A detailed study of an aspect of Canadian Literature. Topics will vary from year to year. Not to be held with the former ENGL 7040. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7040

ENGL 7070 Studies in British Literature since 1900 3 cr
A detailed study of an aspect of post-1900 British Literature. Topics will vary from year to year. Not to be held with the former ENGL 7060. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Equiv To: ENGL 7060

ENGL 7090 Studies in Contemporary Literature 3 cr
A detailed study of an aspect of contemporary literature in English. Topics will vary from year to year. Not to be held with the former ENGL 7080. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7080

ENGL 7140 Studies in International Literature 3 cr
A detailed study of an aspect of international literature in English. Topics will vary from year to year. Not to be held with the former ENGL 7100. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ENGL 7160 Studies in Modernism 3 cr
A detailed study of an aspect of Modernism. Topics will vary from year to year. Not to be held with the former ENGL 7150. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7150

ENGL 7170 Studies in Media 3 cr
A detailed study of an aspect of media and literature. Topics will vary from year to year. Not to be held with the former ENGL 7250. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7250

ENGL 7180 Studies in Old English Poetry 6 cr
Studies in Old English poetry. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ENGL 7190 Special Topics in Literary Figures 3 cr
Focuses on the works of an individual author. Subjects will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ENGL 7300 Creative Writing 3 cr
This seminar will foster advanced craft in a variety of literary genres and will include an analytic and a workshop component. Admission will be at the instructor's discretion, based on the submission of a creative portfolio.

ENGL 7590 Teaching Literature at University 0 cr
Description not available for this course.

ENGL 7600 Bibliography 3 cr
Description not available for this course.

ENGL 7690 Special Topics in Literary Periods 1 3 cr
Description not available for this course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ENGL 7710 Special Topics in Literary Genres 1 3 cr
No description available. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ENGL 7750 Directed Reading 1 3 cr
Directed Reading 1. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

ENGL 7800 Studies in Drama/Theatre 3 cr
Focuses on drama possibly using some consideration of theatrical practice and performance. Topics will vary from year to year. Not to be held with the former ENGL 7790. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7790

ENGL 7840 Studies in Critical Theory 3 cr
Explores literary theory. Topics will vary from year to year. Not to be held with the former ENGL 7830. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7830

ENGL 7860 Topics in Cultural Studies 3 cr
Provides an overview of the theory and practice of cultural studies. Topics will vary from year to year. Not to be held with the former ENGL 7850. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7850

ENGL 7880 Studies in Literature and Film 3 cr
Brings together literature and film. Topics will vary from year to year. Not to be held with the former ENGL 7870. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7870

ENGL 7900 Studies in Medieval Literature 3 cr
A detailed study of an aspect of Middle English literature. Topics will vary from year to year. Not to be held with the former ENGL 7890. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7890

ENGL 7920 Studies in Early Modern Literature 3 cr
A detailed study of an aspect of Early Modern literature. Topics will vary from year to year. Not to be held with the former ENGL 7910. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7910

ENGL 7940 Studies in Eighteenth-Century Literature 3 cr
A detailed study of an aspect of eighteenth-century literature. Topics will vary from year to year. Not to be held with the former ENGL 7930. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7930

ENGL 7960 Studies in Romanticism 3 cr
A detailed study of an aspect of romanticism. Topics will vary from year to year. Not to be held with the former ENGL 7950. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7950

ENGL 7980 Studies in Nineteenth-Century British Literature 3 cr
A detailed study of an aspect of Nineteenth-Century British Literature. Topics will vary from year to year. Not to be held with the former ENGL 7970. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
Mutually Exclusive: ENGL 7970

Entomology (ENTM)

ENTM 7120 Insect Population Management 3 cr
Term papers, tutorials and workshops to study systems of managing populations of injurious and useful insects based upon models of the processes of insect population dynamics. Not all courses are offered every year. Please contact the department regarding course availability.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

ENTM 7150 Advanced Entomology 1 3 cr
A required course for M.Sc. students in Entomology. Students must submit essays and seminars in areas chosen to fit the requirements of their program. They are required to prepare for and participate actively in discusssion sessions and other class meetings. Not available for credit in a Ph.D. program.

ENTM 7200 Advanced Insect Taxonomy 3 cr
Tutorials, laboratory periods and discussion of classification and evolution of insects. Offered 2005-2006. Not all courses are offered every year. Please contact the department regarding course availability.

ENTM 7210 Special Topics in Entomology 3 cr
The content of this course will deal with specific topics of entomology at the advanced level.

ENTM 7220 Advanced Entomology 3 cr
A required course for Ph.D. students in Entomology. Students must submit essays and present seminars in areas chosen to fit the requirements of their program. They are required to prepare for and participate actively in discussion sessions and other class meetings. Not available for credit in a M.Sc. program.

ENTM 7230 Advanced Pollination Biology 3 cr
Tutorials, assignments and discussion periods of current topics relating to the physiology and life history of insect pollinators and their ecological interactions with entomophilous plants. Subjects studied may be selected to fit the interests of individual students.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Consent of instructor.

ENTM 7240 Advances in Physiological Ecology of Insects 3 cr
The effect of environmental factors such as temperature, moisture, light and other organisms on the physiology and ecology of insects. Not all courses are offered every year. Please contact the department regarding course availability. Not to be held for credit with ENTM 4520.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ENTM 2050 or consent of instructor.

Entrepreneurship/Small Bus. (ENTR)

ENTR 7240 Entrepreneurship and New Venture Formation 1.5 cr
Entrepreneurship and enterprising behaviour with an emphasis on the identification and evaluation of viable new venture concepts and their development into successful enterprises.

Finance (FIN)

FIN 7000 Managerial Economics 1.5 cr
Supply, demand, elasticity, perfect competition, monopoly, revenue and cost functions, and determinants of competitive advantage are considered in this course. Economic profit, accounting profit and value creation are compared so they are used properly in the context of optimal business strategy. Not to be held with either IDM 7720 or FIN 7120.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: MSCI 5110 and MIS 5120 (or the former MIS 5110).
Equiv To: FIN 7120, IDM 7720

FIN 7010 Professional Financial Ethics 3 cr
This course focuses on the required code of ethics handbook of practice for the Chartered Financial Analyst Program within a broader ethics in finance perspective, and compliance with the legal and regulatory frameworks governing financial markets in both Canada and the United States. Not to be held with FIN 7240 when the subtitle is equivalent.
Mutually Exclusive: FIN 7240

FIN 7020 Corporate Finance 3 cr
The financial management of businesses including agency problems, valuation, capital budgeting, risk/return relationships, the term structure of interest rates, market efficiency, long-term financing, capital structure, and the use of options and futures for risk management. Not to be held with either of FIN 6070 or FIN 6072.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: MSCI 5110, FIN 7000 and MIS 5120 (or the former MIS 5110).
Equiv To: FIN 6070, FIN 6072

FIN 7080 International Finance 3 cr
The theory and practice of financial management in an international context. Includes foreign currency markets, exchange rates, measurement and management of foreign currency risk, international financing, and foreign direct investment.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: FIN 7020 (or FIN 6070 or FIN 6072).

FIN 7130 Alternative Markets and Instruments 1.5 cr
This course will provide an overview of alternative investments pricing and roles in portfolio construction. Topics will include real estate, private equity, commodities, managed futures, hedge funds, and distresses debt.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: FIN 7020 (or former FIN 6072).

FIN 7140 Financial Modeling 3 cr
This course will cover spreadsheet implementation of practitioner-oriented financial models. May not be held with FIN 4240 (cross listed undergrad course).
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: FIN 7152.
Equiv To: FIN 4240

FIN 7152 Investment Policy 3 cr
The theory and practice of investment management. Topics include: portfolio theory and management, market efficiency, options and futures. This course cannot be held with FIN 7150.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: FIN 7020 (or FIN 6070 or FIN 6072).
Equiv To: FIN 7150

FIN 7180 Behavioural Finance 3 cr
This course will explore how human biases impact the financial decisions of market participants and their practical implications. Topics will include prospect theory, heuristics, market anomalies, and behavioural corporate finance. May not be held with FIN 4250 (cross listed undergrad course).
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: FIN 7020 (or former FIN 6072).
Equiv To: FIN 4250

FIN 7190 Fixed Income Securities 3 cr
This course introduces students to a wide variety of fixed income securities and their markets, and prepares students for the fixed income area in CFA examinations. Topics covered include: debt securities, risks or investing in bonds, the pricing of fixed income securities, the measurement of interest rate risk, the term structure and volatility of interest rates, mortgage-backed and asset-backed securities, the valuation of mortgage-backed and asset-backed securities, credit analysis and interest rate derivatives, among other topics. Prerequisite FIN 7020.
Mutually Exclusive: FIN 7260

FIN 7192 Portfolio Management 3 cr
This course explores the theory and practice of portfolio management: Topics include asset allocation, currency management, fixed income portfolio management, equity portfolio management, risk management and application of derivatives, execution of portfolio decisions, monitoring and rebalancing, and performance evaluation. Students targeting the professional asset management career or planning to take the CFA exam may find this course useful. Prerequisite FIN 7020.
Mutually Exclusive: FIN 7260

FIN 7220 Advanced Seminar in Finance 3 cr
A case-oriented course that will require extensive preparation and presentation of selected cases in corporate financial management; emphasis on the application of theoretical models of finance to real problems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: FIN 7020 (or FIN 6070 or FIN 6072) or consent of instructor.

FIN 7232 Financial Intermediaries and Capital Markets 3 cr
Topics include: the major participants in the capital markets and their functions, the demand and supply of money and the structure of interest rates, non- money financial instruments, recent developments and international factors in the capital markets and capital market risk issues. This course cannot be held with FIN 7230.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite or co-requisite: FIN 7020 (or FIN 6070 or FIN 6072).
Equiv To: FIN 7230

FIN 7240 Readings in Accounting and Finance 3 cr
Supervised readings in one of the areas of accounting and finance.
Mutually Exclusive: FIN 7010

FIN 7260 Selected Topics in Finance 3 cr
A study of selected topics in finance relating to advanced issues in theory and practice. Topics considered will depend on the interests and needs of the participants.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: FIN 7020 (or FIN 6070 or FIN 6072) plus others if specified by the professor.
Mutually Exclusive: FIN 7190, FIN 7192

FIN 7700 Financial Economics 3 cr
Course provides students with a broad theoretical understanding of financial economics required for advanced study of theoretical finance. It covers a variety of topics and discusses the application in different areas of finance. Good knowledge of microeconomics, probability and statistics, and calculus is required.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance), or approval by instructor. Cannot be held with the former FIN 7100.
Equiv To: FIN 7100

FIN 7710 Empirical Asset Pricing 3 cr
Critical evaluation of latest empirical research in finance with focus on equity and bond markets. Tests of intertemporal, multifactor, conditional, and unconditional asset pricing models. Special emphasis on developing econometric skills for the analysis of financial data.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance) and FIN 7700, or approval by instructor. Cannot be held with FIN 7110.
Equiv To: FIN 7110

FIN 7712 Seminar in Corporate Finance 3 cr
This is an advanced course in corporate finance. It provides a theoretical and empirical overview of major topics in corporate finance. The course will survey classic theoretical papers, empirical papers, as well as papers that represent some of the most recent developments in the field.
The objective is to prepare students to critically evaluate and conduct research in corporate finance.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance) and FIN 7700, or approval by instructor. Cannot be held with the former FIN 7520.
Equiv To: FIN 7520

FIN 7714 Advanced Financial Theory 3 cr
Seminar emphasizing the mathematical tools necessary for financial decision malting including no-arbitrage-based asset pricing, optimal consumption and portfolio choice, general equilibrium/asset pricing theory, and dynamic corporate finance theory. Applications in derivative markets, investment theory, and corporate finance.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance) and FIN 7700, or approval by instructor. Cannot be held with FIN 7530.
Equiv To: FIN 7530

FIN 7716 Selected Topics in Finance Research 3 cr
An examination of timely issues in finance research.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the M.Sc. or Ph.D. program in Management (Finance) and FIN 7700, or approval by instructor. Students can earn multiple credits for this course only when the topic subtitle is different.

Fine Art, Studio Courses (STDO)

STDO 7010 Studio Concentration 1 3 cr
Advanced individual instruction and critique in the student's chosen studio area by faculty and visiting artists.

STDO 7020 Studio Concentration 2 3 cr
A continuation of Studio Concentration 1. Advanced individual instruction and critique in the student's chosen studio area by faculty and visiting artists.

STDO 7030 Studio Concentration 3 3 cr
A continuation of Studio Concentration 2. Advanced individual instruction and critique in the student's chosen studio area by faculty and visiting artists.

STDO 7040 Studio Concentration 4 3 cr
A continuation of Studio Concentration 3. Advanced individual instruction in the student's chosen studio area, culminating in the thesis exhibition.

STDO 7110 Graduate Seminar 1 3 cr
An investigation of contemporary art concepts in the context of the studio program of work.

STDO 7120 Graduate Seminar 2 3 cr
A continuation of Graduate Seminar 1. An investigation of contemporary art concepts in the context of the studio program of work.

STDO 7130 Graduate Seminar 3 3 cr
A continuation of Graduate Seminar 2. A further investigation of contemporary art concepts in the context of the studio program of work.

STDO 7210 Themes in Contemporary Art Studio 3 cr
Individual pursuit of studio investigations under a specific theme.

STDO 7230 Contemporary Art Theory 3 cr
An examination of art theory from structuralism, post-structuralism, semiotic, sociological and psychoanalytic methods.

STDO 7300 Special Topics in Fine Art 3 cr
Varying from offering to offering, this course will cover significant topics in Fine Art.

Food Science (FOOD)

FOOD 7090 Unit Process Operations 3 cr
A study of unit operations which are commonly utilized in the food industry with emphasis on separation processes, particle size reduction and heat transfers.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite or co-requisite: BIOE 3530 or equivalent.

FOOD 7130 Food Science Seminar 3 cr
Verbal and written presentation of selected topics in Food Science. This is a required course for all M.Sc. candidates in the Food Science Department.

FOOD 7150 Food Proteins 3 cr
An examination of the structural and functional properties of proteins in foods. Laboratory sessions will emphasize experimental approaches to study proteins in foods, including topics such as surface characterization, thermal properties, rheological behaviour, and chemical modification.

FOOD 7160 Food Carbohydrates 3 cr
A study of the physico-chemical properties and functionality of food carbohydrates. Laboratory sessions will focus on quantitation, structural characterization, thermal properties and rheological behaviour of carbohydrates.

FOOD 7180 Food Science of Cereal Grains 3 cr
The course deals with cereal grains used for human food, the structure of constituents, and the relationship of constituent structure to functionality in the processing of the grains into food products. Emphasis will be on constituents and properties that contribute to optimum processing of wheat.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CHEM 2360 or CHEM 2770 or MBIO 2360 or MBIO 2770, or permission of instructor.

FOOD 7200 Advanced Food Microbiology 3 cr
Detection and quantitation of foodborne microorganisms and related toxins using developing methodology, including rapid microbiological assays with a comprehensive account of basic principles and advanced techniques.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: MBIO 2100, FOOD 4150 or consent of instructor.

FOOD 7240 Topics in Food Science 3 cr
An in-depth study of selected topics of current relevance in Food Science. Available to students in the M.Sc. programs and in the Interdepartmental Ph.D. in Food and Nutritional Sciences.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of Department Head.

FOOD 7260 Advanced Meat Science 3 cr
Builds on fundamental aspects of muscle biochemistry and function to explain how pre- and post-harvest technology affect meat quality and safety. Issues of current concern, their resolution as well as recent advances will be discussed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Consent of instructor.

FOOD 7270 Food Rheology 3 cr
Evaluation of the textural properties of foods provides critical information in the development of quality food products. This course deals with the principles and methodologies in food rheology and includes an examination of the rheological properties of selected food systems.

Foods and Nutr Grad Studies (FDNT)

FDNT 7120 Advanced Seminar in Food and Nutritional Sciences 3 cr
A critical review of selected topics in food and nutritional sciences presented in both verbal and written forms. This is a required course for all Ph.D. students in the interdepartmental food and nutritional sciences program.

French (FREN)

FREN 6000 French Reading Knowledge 0 cr
For graduate students in other departments which require a reading knowledge of French. This course is graded pass/fail.

FREN 6010 Spanish Reading Test 0 cr
No description available.

FREN 6030 Italian Reading Test 0 cr
No description available.

FREN 7520 Topics in Literary Periods 1 3 cr
Topics in Literary Periods 1. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

FREN 7540 Topics in Literary Genres 1 3 cr
Topics in Literary Genres 1. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

FREN 7560 Topics in Critical Theory and Practice 1 3 cr
The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

FREN 7580 Special Topics 1 3 cr
Special Topics 1. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

FREN 7660 Études sur Diderot 3 cr
Ce cours comprendra une étude d'aspects choisis de l'oeuvre et de la pensée de Diderot.

FREN 7740 Études sur Beauvoir 3 cr
Une sélection d'oeuvres de Simone de Beauvoir étudiées selon la perspective de la critique féministe contemporaine.

FREN 7760 La Critique littéraire féministe 3 cr
Une sélection de textes littéraires et théoriques analysés selon la perspective de la critique féministe contemporaine.

FREN 7770 Tendances nouvelles du roman 3 cr
Une étude de romans publiés depuis vingt ans selon la perspective de la critique contemporaine.

General Management (GMGT)

GMGT 7060 Readings in Business Administration 3 cr
Supervised readings in one of the areas of business administration including human resource management, industrial relations, organizational behaviour, policy and environment.

GMGT 7070 Administrative Studies Research Project 6 cr
Research in any one of the areas of administrative studies.

GMGT 7080 Research Methods 3 cr
Principles of research design and data collection with examples drawn across the areas of marketing management, industrial relations, policy analysis, etc. Both cases and computer-based exercises are used.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MSCI 5100.

GMGT 7090 Organizational Decision-Making 3 cr
A study of the goal-setting and decision-making processes in organizations and the implications for the growth and survival of such organizations.

GMGT 7100 Interpersonal Processes 3 cr
An examination of theories of interpersonal behaviour and processes as they apply to managerial situations. Emphasis upon individual behaviour and change, group dynamics, leadership behaviour, and communications.

GMGT 7110 Business and Its Environment 3 cr
Analysis of the environmental factors within which a business operates.

GMGT 7120 Organizational Power and Politics 3 cr
An examination of personal, interpersonal and organizational power in the context of organizational politics. Topics covered include rational versus political models of organizations, the accumulation and management of personal power, the politics of decision-making, the politics of managerial succession, the politics of budgets, authority, intergroup conflict, and bargaining and negotiation processes.

GMGT 7200 Critical and Creative Thinking 1.5 cr
This course introduces students to different ways of thinking about cognitive dimensions of organizational leadership. Approaches include the creative (divergent perspective), the critical (convergent perspective) and the holistic (systems-perspective) with special emphasis on understanding the nature and appropriateness of different forms of cognition in organizational leadership.

GMGT 7210 Strategy 3 cr
Students will integrate and apply concepts from various functional areas in analyzing organizational resources and capabilities, and environmental opportunities and threats. Students will study evolving strategic management problems and practices, and examine issues of formulation and implementation.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: ACC 7010 (or ACC 6050), FIN 7020 (or FIN 6072), GMGT 7200, GMGT 7220 (or one of HRIR 7450 and GMGT 6030), MKT 7010 (or MKT 6080), and OPM 7120 (or OPM 6090). Pre- or Co-requisites: FIN 7000 (FIN 7120 or IDM 7720), ACC 7020 (or ACC 6060), MIS 7120 (or MIS 6150), IDM 7120 (or IDM 7060), IDM 7130, and IDM 7510.

GMGT 7220 Managing People in Organizations 3 cr
This course examines strategies and methods for the management of people in organizations, their implications for organizational effectiveness, and both the challenges and opportunities they present to managers within the Canadian context and beyond.

GMGT 7230 Negotiations 3 cr
This course helps familiarize students with the principles of integrative and distributive bargaining as a tool for decision-making and conflict resolution. It draws on theory and research from psychology, economics, and conflict management, and allows students to apply these principles in simulated negotiation contexts.

GMGT 7350 Administration: Selected Topics 3 cr
Topics in one of the areas of business administration including human resource management, industrial relations, organizational theory and behaviour, and business policy and strategic management.

GMGT 7360 Organizational Behaviour and Self Development 3 cr
This course will operate in a seminar format with two goals. The first goal is to provide an environment in which the student can develop and manage to successful conclusion a project in which they have significant intrinsic interest. The second goal is to improve the student's understanding of the inner life of an organization by increasing his/her ability to discriminate between the organizational "ropes to skip and the ropes to know."

GMGT 7370 Managing Innovation 3 cr
An examination of organizational design characteristics in the context of a competitive international perspective. Emphasis is on an organizational and technological innovation to facilitate the development of new products or processes or to implement change in existing products or processes. Topics covered include Canadian experience and policy, facilitators and inhibitors in the creative process, diffusion of innovations, and the aims of the patent process.

GMGT 7400 Readings in Organizational Behaviour (Ph.D.) 3 cr
An examination of theory and research from the social and administrative sciences that focuses on the interaction between organizations and their environments. The evaluation and synthesis of theoretical and empirical work in this area will be emphasized.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the Ph.D. program in Management (Organizational Behaviour) or approval by instructor.

GMGT 7410 Doctoral Seminar in Organizational Behaviour (Ph.D.) 3 cr
An examination of theory and research from the social and administrative sciences that is relevant to the behaviour of individuals and groups within organizations. Emphasis will be placed on evaluation and synthesis of theoretical and empirical work in this area.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the Ph.D. program in Management (Organizational Behaviour) or approval by instructor.

GMGT 7440 Doctoral Seminar in Organizational Theory (Ph.D.) 3 cr
The major goal of this course is to familiarize students with central schools of thought within organization theory. As with other theories in the social sciences, these schools of thought tend to be based on differing assumptions about the nature of the organizational world, the operation of causality, epistemology, and the role of human actors.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the Ph.D. program in Management (Organizational Behaviour) or approval by instructor.

GMGT 7510 Strategic Leadership and Managing Change 1.5 cr
An examination of the role of the manager as a change agent and processes associated with strategic vision and change. Analysis of factors affecting strategic decisions and how organizations adapt to their environment. Emphasis is upon the role of leaders: transformational leadership, charisma, organizational design and managing organizational culture change.

GMGT 7520 Issues in Managerial Communication 3 cr
An examination of strategies and development of skills for effective oral, written, non-verbal, interpersonal, group, cross-cultural, and ethical communication in management.

GMGT 7530 Selected Topics 3 cr
An examination of current issues in areas which could, for example, include: organizational behaviour, organizational theory, strategy, human resource management, and industrial relations.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

GMGT 7540 Doctoral Seminar in Research Methods (Ph.D.) 3 cr
Principles of research design and data collection appropriate for the areas of marketing, management, industrial relations, policy analysis, finance, management science, etc. Research problems and issues will be discussed from a number of perspectives. Conceptual material, statistical analyses, theoretical material and the utilization of statistical application software are used as the bases for seminar discussion.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the Ph.D. program in Management or approval by instructor.

GMGT 7710 Managerial Communication 1.5 cr
Focus is on the interpersonal, intergroup, and intra-organizational communication skills required for effective leadership, and the objectives are to assist the participants in the following: increasing the clarity, correctness, and effectiveness of written and oral communication; recognizing and analysing communication dynamics at work in personal, group, and organizational interactions; increasing combination flexibility and proficiency in times of corporate challenge, change, and crisis.

GMGT 7720 Business Conditions Analysis 1.5 cr
To provide an awareness of key components of the economic/business environment. Identifies critical indicators that affect decision-making and suggests strategies for forecasting future conditions. Topics covered include critical demographic trends, the change technological frontier, international trade, finance, and investment trends, and trends in interest rates and exchange rates. A theoretical overview will precede the discussion of business conditions indicators.

GMGT 7740 Business/Government Relations 1.5 cr
Focuses on the logic of political-economic-business relations. The point of view is that of the manager. Specific tools of analysis are discussed that assist managers in understanding and working with aspects of public policy which interface with their private sector decisions.

Geography (GEOG)

GEOG 7010 Selected Topics in Geography 3 cr
Advanced study of a selected topic from any one of the department's fields of specialization.

GEOG 7030 Regional Analysis 3 cr
A seminar course reviewing theories of regional development which have planning applications. Further, it assesses government policy aimed at regional intervention and notes procedures of evaluation.

GEOG 7080 Quantitative Methods 3 cr
A discussion of analysis and model construction in the study of urban and rural systems; analysis of socioeconomic and demographic data, construction of measures, and testing of models.

GEOG 7180 Methodology of Agricultural Geography 3 cr
The course first provides an understanding of social and economic concepts in agricultural geography, and then examines methods of data collection, sampling techniques, and analysis with relevance to specific research topics.

GEOG 7200 Environment, Resources, and Population 3 cr
This course discusses the contemporary imbalance between population and resources. The consequences of resource exploitation upon the natural environment are also examined.

GEOG 7260 Selected Regional Issues in Geography 3 cr
Advanced study of specific issues and problems in selected world regions.

GEOG 7290 Energy Analysis 3 cr
A survey of origins, methods and applications of energy analysis, a new technique of system energetics designed to provide information for a more efficient use of scarce natural resources.

GEOG 7310 Geographic Theory and Methodology 3 cr
A discussion of the meaning of explanation in human geography, the status of geography as a science and the construction of theory.

GEOG 7332 Concepts in Atmospheric Modelling 3 cr
This course will primarily focus on numerical modelling applications and techniques of the Earth's atmosphere with an emphasis on weather prediction. This includes understanding basic modelling terminology, numerical schemes, structure of models, types of models, what is required to run a model, and an introduction to data assimilation and ensemble techniques to weather prediction.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of instructor.

GEOG 7360 Interdisciplinary Perspectives on Issues in the Environment 3 cr
An intensive examination of research relating to various issues in the environment, this course will challenge students to consider crosscutting themes found in the literature and from their own learning experiences, and apply them to environmental problems.

GEOG 7380 Advanced Ecotoxicology: Understanding Stress Ecology 3 cr
Ecotoxicology characterizes how organisms interact with anthropogenic and natural stressors in an ecological context. This course is an examination of the fundamental science, approaches and issues being addressed in the field. Students should have a four-year science-based undergraduate degree and be registered in a graduate program.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of instructor.

GEOG 7400 Field Topics in Arctic Systems 3 cr
Field and practical experience in selected topics of multidisciplinary research in Arctic System Science from science theory to field sampling, to modeling and remote measurements. Focuses on the ocean-sea ice-atmosphere interface and its relationship with the biological and geochemical processes operating in the cryosphere.

GEOG 7420 Synoptic Meterology and Weather Analysis 3 cr
The course covers applied aspects of meteorology in terms of weather analysis and forecasting techniques for synoptic-scales and meso-scales using various meteorological tools. An introduction to severe weather forecasting techniques will also be described. Familiarity with computers is essential.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of instructor.

GEOG 7440 Climate Change 3 cr
The course will provide an overview of General Circulation Models (GCMs) and how these models are used to study various aspects of global climate change. More specifically the course will deal with the coupling between the atmosphere, hydrosphere, lithosphere and biosphere from the perspective of Earth System Science.

GEOG 7450 Boundary-Layer Climatology and Micrometeorology 3 cr
A seminar-based course devoted to the study of advanced topics in microclimatology and micrometeorology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of instructor.

GEOG 7470 Techniques in Climatology 3 cr
This course overviews the theoretical basis that underpins the measurement and application of climate elements in micrometeorological and microclimatological research.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of instructor.

GEOG 7480 Advanced Methods in Remote Sensing 3 cr
This course provides instruction in the current theory and application of remote sensing technology to Earth System Science. Emphasis will be placed on the processing and interpretation of remote sensing imagery and the integration of remote sensing data with other spatial data.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: GEOG 3200 (C), or permission of instructor .

GEOG 7500 Biogeography 3 cr
The course will emphasize principles and approaches to understanding biogeography on a worldwide scale with specific examples from Canadian and Manitoban research. Topics discussed include the physical environment and biological interactions, effects of disturbance and climate change, the geography of biological diversity, evolution and extinction.

GEOG 7580 Gender and the Human Environment 3 cr
From criticalsocial science theoretical positions, this course asks student to examine what we can learn about how humans live on the earth if we see them as gendered. Just as we may also understand humans and their interactions in and with spaces, places and environments through the lenses of race, ethnicity, class,age and /or combinations of these categories with gender. Cannot be held for credit with GEOG 4280.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.
Equiv To: GEOG 4280

GEOG 7610 Graduate Seminar in E&G (Masters) 3 cr
The course allowed students to develop research and communication skills and provides a greater understanding of research within geography, environmental science and environmental studies; it is organized around presentations given by the students on their area of expertise; course graded pass/fail.

GEOG 7620 Graduate Seminar in E&G (PhD 1) 1.5 cr
The course allowed students to develop research and communication skills and provides a greater understanding of research within geography, environmental science and environmental studies; it is organized around presentations given by the students on their area of expertise; course graded pass/fail.

GEOG 7630 Graduate Seminar in E&G (PhD 2) 1.5 cr
The course allowed students to develop research and communication skills and provides a greater understanding of research within geography, environmental science and environmental studies; it is organized around presentations given by the students on their area of expertise; course graded pass/fail.

GEOG 7750 Understanding Contemporary Environmentalism: Power and Discourse 3 cr
This course will provide students with an advanced understanding of the relationships between nature and society by examining the rise of environmentalism through the past 50 years. Special attention will be paid to recent developments within the field of environmentalism and to theoretical work in the field of political ecology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: Permission of Instructor.

GEOG 7780 Storms-Mesoscale 3 cr
This course focuses on a range of storms, and mesoscale phenomena in the summer and winter. These include thunderstorms, tornadoes, squall lines, lightening, low level jets, gust fronts, blizzards, freezing rain, orographic storm, and polar lows. The emphasis in on the physical mechanisms leading to these events and it also examines how they may change in our warming climate. This course cannot be held for credit with GEOG 4780.
Equiv To: GEOG 4780

GEOG 7800 Climate and Society 3 cr
This course explores the causes, impacts, and responses to climate change. It identifies key concepts and analytic approaches to understand the social-ecological processes that drive climate change and influence responses. It engages with inequalities and the role of diverse relationships, values, identities, and knowledge systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: Permission of Instructor.

GEOG 7872 Advanced Methods in Geomatics 3 cr
This course focuses on advanced theory and application of geomatic methods and technologies in spatial problem solving. Laboratories provide practical experience in the application of spatial multivariate methods.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of instructor.

GEOG 7910 Contemporary Issues in Artic Science 3 cr
The course will deal with the coupling between the ocean-sea ice-atmosphere (OSA) interface and examine the role of these processes in physical-biological coupling. Seminars will be presented on both scientific and methodological principles required to understand how climate change affects the Arctic system.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of Department Head.

GEOG 7930 Oceanography: Chemical 3 cr
This course deals with the sources, distribution, and transformation of chemical constituents of the oceans, and the processes that control them. The emphasis will be given to biologically or climatically significant elements such as carbon, nitrogen, phosphorus, iron and mercury in the Arctic Ocean. Not to be held with GEOG 4930.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of the Department Head.
Equiv To: GEOG 4930

GEOG 7940 Sea Ice in Arctic Marine System 3 cr
This course will provide a general background on the importance and current knowledge of sea ice with a focus on the Arctic marine system. The material will be provided in a highly disciplinary manner, touching on fields of geophysics, physical geography, biology and chemistry. Not to be held with GEOG 4940.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of Instructor.
Equiv To: GEOG 4940

GEOG 7960 Oceanography: Biological II High Trophic Levels 3 cr
This course will examine the oceanographic-biological coupling occuring in the Arctic region, focusing on environmental conditions related to higher trophic levels and impacts of climate change. The aim of this course will extend the learning of the 3000-level course that examines the biological oceanography, which focus on the environmental factors that control primary production and lower tropic levels in the world's oceans. Not to be held with GEOG 4960.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of Department head.
Equiv To: GEOG 4960

Geological Sciences (GEOL)

GEOL 7200 Earth Systems of Central Canada 3 cr
An overview of the Earth structure, bedrock geology, surficial geology and hydrology of Manitoba and adjacent regions from an Earth systems perspective; and the occurrence and development of mineral, petroleum and water resources.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: enrolment in a M.Sc. or Ph.D. program, and permission of department.

GEOL 7230 Geophysics of the Earth's Crust and Mantle 3 cr
Processes in crust-mantle evolution and geophysical methods used to study this region of the earth.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: (GEOL 4320), and (GEOL 4330).

GEOL 7310 Quaternary Geology 3 cr
Seminars and lectures on sedimentary aspects of the Quaternary Epoch with emphasis on glaciation. The glacial and interglacial stratigraphic record on the continents and in the ocean basins. Three-day field trip in mid-September.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: (GEOL 3490), and (GEOL 3900).

GEOL 7350 Remote Sensing in the Earth and Planetary Sciences 3 cr
Selected topics in remote sensing with emphasis on geophysical and geologic problems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: B.Sc. (Honours Geology, Geophysics, or Geological Engineering), or permission of instructor for graduates of other disciplines.

GEOL 7470 Advanced Petroleum Geology and Geochemistry 3 cr
Lectures and seminars examining the four major components of petroleum geology: source and migration, reservoir, trap, and economics. Major emphasis on the origin and generation of petroleum and source rock geology. Field trip and core logging required.

GEOL 7480 Advanced Seismology 1 3 cr
Theory of wave propagation; source mechanisms; other selected topics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: GEOL 7260.

GEOL 7490 Advanced Seismology 2 3 cr
Seismic surface waves and normal modes of Earth, Earth tides and dynamic evolution.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: GEOL 7480 or equivalent.

GEOL 7540 Isotope Geology and Geochronology 3 cr
The principles and methods of isotopic age determination and the measurement of geological rate processes using certain radioactive nuclides and the variations of the isotopic compositions of their daughter products. The evolution of the earth's mantle, continental and oceanic crust. The application of light, stable isotope fractionation to understanding geological processes.

GEOL 7550 Hydrothermal Petrochemistry 3 cr
The chemistry, mineralogy, and petrology of mineral deposits and alteration zones of the hydrothermal type, and their association with igneous and tectonic events. Theory and experimental data on metasomatic processes.

GEOL 7590 Advanced Paleontology 1 3 cr
Topics in paleobiology of the invertebrates, and principles of paleontology. Upon request, course may be adapted to individual requirements of students in other disciplines (for example, specific groups of invertebrates, paleoecology, trace fossils, etc.).
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: (GEOL 3310), and (GEOL 4310), or permission of instructor.

GEOL 7600 Advanced Paleontology 2 3 cr
Topics in paleobiology of the invertebrates, and principles of paleontology. Upon request, course may be adapted to individual requirements of students in other disciplines (for example, specific groups of invertebrates, paleoecology, trace fossils, etc.).
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: GEOL 3310, or GEOL 4310, or permission of instructor.

GEOL 7700 Advanced Clastic Sedimentology 3 cr
Lectures and seminars on clastic depositional environments. Critical evaluation of accepted facies models followed in each case by examination of the ancient record. One week field trip and core logging required.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: GEOL 3900, or permission of instructor.

GEOL 7720 Geophysical Imaging and Data Processing 3 cr
Advanced frequency filter design; deconvolution methods for seismogram; velocity and wavefield stacking; various digital methods for potential field data; principles of tomography and geophysical imaging techniques.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: (GEOL 3740), and GEOL 7260, or permission of instructor.

GEOL 7740 Workshop in the Geological Sciences 1 3 cr
Critical, in-depth group study of problems and new concepts in the geological sciences; discussion of current research by staff and visiting scientists; students will pursue individual research interests and will work with staff on specific topics.

GEOL 7750 Workshop in the Geological Sciences 2 3 cr
Critical, in-depth group study of problems and new concepts in the geological sciences; discussion of current research by staff and visiting scientists; students will pursue individual research interests and will work with staff on specific topics.

GEOL 7760 Seminar in Geological Sciences 3 cr
A discussion of topics of current interest from the whole spectrum of geological sciences to inform students on research work outside their specialty. Required of all graduate students. For ancillary credit only. Geological Sciences Colloquium. Weekly discussion of topics of current interest. Presentation of recent research from geological literature, the department, and visitors. Required of all graduate students who have received credit for GEOL 7760.

GEOL 7780 Advanced Carbonate Sedimentology 3 cr
Lectures and seminars on selected topics of carbonate sedimentology, including depositional environments, lithofacies sequences and diagenesis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: GEOL 3900, or permission of instructor.

GEOL 7790 Advanced Instrumental Techniques in Geology 3 cr
Lectures and laboratory course covering the application of microbeam, mass spectrometer, diffraction and wet geochemical analytical techniques in mineralogy and geochemistry. Includes coverage of ICP, PIXE, powder and single crystal diffraction and electron microprobe analysis.

GEOL 7810 Electromagnetic Methods in Geophysics 3 cr
Examination of the theory and application of electromagnetic methods in geophysics. Topics include: electrical properties of earth materials, review of EM methods, EM theory for layered media, EM responses of simple structures and case studies.

GEOL 7820 Environmental Geophysics 3 cr
Examination of the application of geophysics to environmental targets. Topics will vary according to student interest and may include aspects of new-surface geophysics, engineering geophysics, geophysics of global climate change and geophysical risk assessment.

German (GRMN)

GRMN 6000 Reading Language Test 0 cr
No description available.

GRMN 7200 Literary and Cultural Theory 3 cr
A survey of the major theoretical approaches to German and Slavic literature and cultures. Discusses the aesthetics of Enlightenment and Idealism, Nietzsche, Freud, Russian Formalism, Prague Structralism, hermeneutics, semiotics, dialogism (Bakhtin), the Frankfurt School, collective memory, gender studies, post-colonialism, and multi-culturalism.

GRMN 7210 Introduction to Second Language Acquisition and Methods of Language Teaching 3 cr
This course provides a general introduction to theories and approaches in second language acquisition (SLA) and methods of language teaching specifically designed for MA students of German and Slavic languages.

GRMN 7240 Colloquium in German Studies 1 3 cr
A detailed study of theoretical and methodological questions in German literature and culture. Course contents will vary from year to year depending on the needs and interests of students and staff.

GRMN 7242 Colloquium in German Studies 2 3 cr
A detailed study of German stylistics, German as a Second Language, or the structure of the German language. Course contents will vary from year to year depending on the needs and interests of students and staff.

GRMN 7300 Special Topics in German Literature and Culture 1750-1945 1 3 cr
Topics dealing with German literature and culture focusing on an author, a systematic topic or period between 1750 and 1945. Contents will vary from year to year depending on the needs of students and staff. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

GRMN 7330 Seminar in Contemporary German Literature and Culture 3 cr
Topics dealing with German literature and culture in the second half of the 20th and in the 21st century. Contents will vary from year to year depending on the needs of students and staff.

GRMN 7340 Seminar in German Film and Media Studies 3 cr
Studies a variety of German media theories and sources, including newspaper, television and film in the 20th and in the 21st centuries.

GRMN 7350 Seminar in German and European Literature and Culture 3 cr
Topics dealing with German literature and culture within a European comparative context. Contents will vary from year to year depending on the needs of students and staff.

GRMN 7360 Independent Studies in German 3 cr
Each student will work with an instructor to prepare a reading program in an appropriate area, depending on the needs of students and staff. The student will present written assignments as required. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

Graduate Studies (GRAD)

GRAD 6000 Summer Research 0 cr
Research

GRAD 6100 Visiting Canadian Student Research Course 0 cr
Registration in GRAD 6100 is to formalize the status of visiting Canadian Graduate Student Researchers. Students must meet the terms of the Canadian Graduate Student Research Mobility Agreement (CGSRMA), and submit the Visiting Graduate Student Research Authorization form to be eligible to register.

GRAD 7000 Master's Thesis 0 cr
Should show in general, that the student has mastery of the field and is fully conversant with relevant literature. The process, schedule, format, and style must meet the requirements of the Faculty of Graduate Studies. After approval of the thesis by the thesis examining committee and the completion of any revisions required by that committee, two copies of the thesis must be submitted to the Graduate Studies general office. Thesis students must pass an oral examination on the subject of the thesis and matters relating thereto as prescribed by the department. This course is graded pass/fail.

GRAD 7010 Comprehensive Examination 0 cr
Takes the form of an exercise in the practical application of knowledge and skills, involving the careful definition of a problem and a report on the results in a manner suitable for evaluation by an examining committee. The comprehensive examination is an independent work, for an architectural project selected to demonstrate professional knowledge and skills, culminating in a public presentation. A faculty member serves as an advisor. Consultation, advice, and criticism will be provided by other members of the Faculty and specialized professionals in the various technical and related fields. This course is graded pass/fail.

GRAD 7020 Master's Re-registration 0 cr
Masters re-registration

GRAD 7022 Master's Re-registration 0 cr
MBA and MPA students who are not registering for any courses in Fall and/or Winter terms must register for GRAD 7022 in order to retain status.

GRAD 7030 Master's Practicum 0 cr
Takes the form of an exercise in the practical application of knowledge and skills, involving the careful definition of a problem and a report on the results in a manner suitable for evaluation by an examining committee. This course is graded pass/fail.

GRAD 7050 M.Eng. Project and Report 6 cr
Project and Report

GRAD 7060 Diploma Re-registration 0 cr
Diploma re-registration

GRAD 7090 Design Thesis 0 cr
The Design Thesis is an independently driven creative work developed within a focused subject of inquiry and directed by architectural questions. It is carried out through intensive research, study, and design explorations that culminate in a thoroughly developed architectural proposition. It is to be fully recorded in a final document.

GRAD 7200 MFA Thesis/Studio Exhibition 0 cr
The MFA Thesis is comprised of a written statement and visual thesis that must show that the student has developed an original contribution to knowledge in visual art. The process, schedule, format, and style must meet the requirements of the Faculty of Graduate Studies. Thesis students must pass an oral examination on the subject of the written statement and visual thesis. This course is graded pass/fail.

GRAD 7300 Research Integrity Tutorial 0 cr
In a highly interactive environment, participants will be exposed to practical advice on how to deal with challenging situations that may arise while doing research within their own area of expertise. The course also addresses the latest standards, codes, and policies in the responsible conduct of research both locally and globally. Online tutorial delivered through UM Learn with no pre- or co-requisites. This course graded on a pass/fail basis.

GRAD 7500 Academic Integrity Tutorial 0 cr
New and continuing Masters and Doctoral students will learn about academic integrity by participating in online tutorials. A brief learning-check will be written after the tutorials have been viewed. Students newly admitted to a graduate program must successfully complete this course within the first term of registration. The course grade is a pass/fail.

GRAD 8000 Doctoral Thesis 0 cr
Doctoral Thesis

GRAD 8010 Doctoral Candidacy Examination 0 cr
Doctoral Candidacy Examination

GRAD 8020 Doctoral Re-registration 0 cr
Doctoral re-registration

Greek (GRK)

GRK 7100 Greek Literature 3 cr
A reading course involving a selected Greek author or authors, or a set of related works. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

GRK 7110 Topics in Greek History 3 cr
This course will investigate aspects of Greek history, emphasizing different topics, sources, and theoretical approaches. Possible focuses for the course include a period of Greek history, or a particular region of the Greek world. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

History (HIST)

HIST 7110 Advanced Historical Methodologies 6 cr
This course provides advanced training in key methodologies for historical research and knowledge mobilization. The goal of the course is to familiarize students with the protocols, ethics, procedures, and best practices for historical research in a variety of settings. Students will have opportunities to apply this training to specific projects and to develop a range of skills for historical research, alongside building critical understanding of various historical methodologies. Students will also complete certification in key areas such as oral history and research ethics.

HIST 7190 Studies in United States History since 1877 6 cr
An examination of United States history from the close of the Reconstruction era to the present. Students will gain exposure to the political, economic, social, and/or cultural history of the United States. Course content may vary according to the instructor.

HIST 7220 Selected Topics in British History 6 cr
A detailed examination of selected topics and problems in British history. Topics and content will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

HIST 7230 Nineteenth-Century Britain 6 cr
A study of British culture, politics, and diplomacy, 1830-1900.

HIST 7240 State and Society in Latin American History 6 cr
Readings focused on state/society relations in the history of Latin America since colonial times. After considering different theoretical approaches, the course will analyze recent works that cover different historical periods, countries, issues, and social factors.

HIST 7270 Special Studies in Social History 6 cr
A seminar course, the content of which will vary from year to year. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

HIST 7290 Reading Seminar in Canadian History 6 cr
This course explores the rich and changing historiography of Canada. The specific focus will vary year to year and may include Indigenous people and colonization, migration and immigration, gender and sexuality, the history of the environment, or histories of health and medicine. Students can earn multiple credits for this course only when the topic subtitle is different.

HIST 7330 History of Western Canada 6 cr
A research course in the history of Western Canadian. The course will explore recent historical approaches to western Canada and introduce students to archival and primary research.

HIST 7372 History of Archiving and Archival Records 6 cr
An examination of aspects of the history of archival thought, activities, and records from antiquity to the present. Canadian and international examples since the nineteenth century are emphasized. Students may not hold credit for both HIST 7372 and the former HIST 7370.
Equiv To: HIST 7370

HIST 7382 Archiving in the Digital Age 6 cr
An examination of selected contemporary issues in archival theory and activities in Canada and internationally, with emphasis on the impact of computerization on archiving. The issues are studied in relation to the history of archiving and archival records. Students may not hold credit for both HIST 7382 and the former HIST 7380.
Equiv To: HIST 7380

HIST 7392 Selected Topics in Archival Studies 3 cr
A detailed examination of selected topics and problems in Archival Studies. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

HIST 7394 Internship in Archival Studies 0 cr
The internship provides a work experience in a working archive in government, non-profit, business, industry, or similar professional setting to students admitted to the JMP Archival Studies Stream who have successfully completed HIST 7372 and HIST 7382. Required submission of a written report covering the work completed during the internship. This course is evaluated on a pass/fail basis.

HIST 7470 The Later Middle Ages 6 cr
Selected topics in economics, social, cultural, art and religious history of the later medieval world.

HIST 7500 Jewish and European History and Historiography 6 cr
This seminar examines issues relating to Jewish history and historiography in the context of European history and historiography.

HIST 7510 Early Modern European History 6 cr
A seminar which studies early modern Europe from the perspective of new approaches to historiography.

HIST 7520 The Age of Enlightenment 6 cr
Emphasis on 18th century French intellectual history and its relationship to the origins and course of the French Revolution. Some reading knowledge of French is almost essential.

HIST 7560 The Russian Revolution 6 cr
The events constituting the Revolution proper (1917-21) will be studied in relation to their historical background and in the light of their subsequent impact both nationally and globally.

HIST 7600 Northern Historical Studies 6 cr
This course is based upon a number of studies of various aspects of the North. Particular emphasis is given to the North in relation to the fur trade, exploration, and Canadian development.

HIST 7630 History of Health and Disease 6 cr
An introduction to principal issues and approaches in the history of health and disease. It is not meant to be a strictly chronological survey. Topics and themes may include the development of nursing and medical professions; the transformation of the hospital; mental health; alternative therapies; colonization, infectious disease and aboriginal health; and health and the state.

HIST 7640 Social History of Health and Disease in Modern Canada 6 cr
This course explores the history of health and health care in Canada, with a focus on the late 19th and 20th century. Topics will include colonization, infectious disease, and Aboriginal health; the evolution of medical and nursing professions and the modern hospital; mental health; cancer; alternative therapies; childbirth; and old age. Analytical categories of gender, race, ethnicity, class, and sexuality will run throughout the material.

HIST 7672 Studies in Canadian History 6 cr
This course will focus on social, intellectual, political, and economic themes with emphasis on the western Canadian experience. Specific topics will vary from year to year depending upon the interests of the instructor. Students may not hold credit for both HIST 7672 and the former HIST 7670.
Equiv To: HIST 7670

HIST 7700 Historical Method 6 cr
A seminar and workshop in historical method. The topics covered will encompass conventional research, analysis and writing, as well as the application of social science techniques to the analysis of historical problems, the fundamentals of data processing, and computer applications.

HIST 7710 History and Cultural Studies 6 cr
A working guide to interdisciplinary approaches of the new field of Cultural Studies, examining its principal theoretical bases and existing and potential applications for the historian.

HIST 7730 Modern Latin America 6 cr
An examination of selected themes such as economic and social change, political modernization, and external influences and intervention in Latin America during the 19th and 20th centuries.

HIST 7740 England in the Long Eighteenth Century 6 cr
Selected themes in the history of England's long eighteenth century from 1660-1840. Specific topics will vary from year to year but will generally include the transformation of political culture, the consequences of war, the question of national identities, the emergence of commercial society and the changes to social structure.

HIST 7750 Gender History in Canada 6 cr
Explores the roles, images and experiences of masculinity and femininity in the past. Will familiarize students with the changing theoretical and historiographical terrain of gender history. It will draw on the international literature but focus on the history of gender in Canada, examining how historians analyse masculinity, femininity, the family, sexuality, politics, race/ethnicity, moral regulation, class, nation, and colonialism.

HIST 7760 History of Aboriginal Rights 6 cr
A study of Aboriginal rights from early contact to the present with a particular emphasis on treaties, the courts, and Aboriginal efforts to enforce specific forms of rights.

HIST 7770 Selected Topics 6 cr
A program of independent reading and/or research on selected topics, undertaken and arranged by a student in consultation with his prospective instructor, upon the approval of the Graduate Chair. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

HIST 7772 Selected Topics 3 cr
The content of this course varies. Courses offered under this number will be advanced graduate seminars investigating topics that are not part of an existing seminar course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

HIST 7774 Independent Study/Reading 3 cr
The content of this course will vary. It will be an advanced, independent reading/study course for graduate students, on a topic of particular interest to the student. Normally the topic will be one that the student cannot study in an existing seminar course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

HIST 7776 Major Research Paper 0 cr
The Major Research Paper (MRP) is a piece of original writing based on primary research, submitted in fulfillment of the JMP in History, Major Research Project stream. It is of roughly 34-40 pages (8,500-12,000 words). The student consults the Chair of the Joint Discipline Committee in History to select an Advisor. The student meets with the Advisor to develop a topic for the paper. After the MRP is submitted, it is ciruclated to a second reader. The MRP is graded pass/fail.

HIST 7820 Issues in Modern Asian History: Selected Topics 3 cr
Content will vary. Emphasis will be on the analyses of important issues and recent developments in the history and historiography of modern Asia. Consult the History Department for particulars. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

HIST 7910 Studies in Modern World History 6 cr
Advanced historical study of topics in world and global history. Course examines historiographical debates in the field and may include opportunities for original primary research. Specific thematic, methodological, and theoretical approaches may vary by instructor.

HIST 7920 Popular Radicalism in the Modern World 6 cr
Selected topics in the history of popular movements of social and political protest in the modern world. The course considers problems such as the conditions and motivations that give rise to social movements, the development of radical theory and political practice, and the culture of dissent.

HIST 7930 Imperialism, Decolonization and Neo-Colonialism 1700-Present 6 cr
An exploration of theoretically informed literature that has attempted to engage with and understand Imperialism and Colonialism, Anti-colonial nationalism, National liberation movements and Neo-Colonialism.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

HIST 9090 UW GHIST-7507 Gender History in Canada 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9130 UW GHIST-7002 Independent Study/Reading 3 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9304 UW HIST 7303 Topics in Early Modern Women's History (1500-1700) 3 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9312 UW HIST 4212 Topics in Modern European History 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9322 UW HIST-4902 Selected Topics in the History of Science 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9420 UW GHIST-7210 Early Modern European History 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9540 UW GHIST-7608 Studies in American History to 1877 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9570 UW HIST 4610 The Origins of the Civil War in the United States 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9580 UW HIST 4910 Themes in the History of Medicine 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9610 UW GHIST-7517 Studies in Canadian History 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9612 UW HIST 4103 Colonization and the Age of Modernity in Latin America 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9620 UW HIST 4213 Topics in Early Modern Women's History 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9632 UW GHIST-7903 History of Health and Disease 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9640 UW HIST-4130 History and Memory 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9642 UW GHIST-7007 History and Memory 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9646 UW GHIST-7108 Studies on Modern World History 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9648 UW GHIST-7001 Selected Topics 3 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9650 UW HIST-4112 History of the Atlantic World, 1450-1825 3 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9670 UW HIST 4830 The History of Museums and Collecting 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9672 UW Advanced Studies in Canadian Social History 3 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9674 UW HIST 7512 Indigenous History: Advanced Studies 6 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

HIST 9676 Indigenous History: Advanced Studies 3 cr

HIST 9702 UW HIST 7702 History of the Atlantic World 3 cr
Course may be taken as part of a Master of History program offered jointly with the University of Winnipeg.

Human Anat. and Cell Science (ANAT)

ANAT 7012 Advanced Brain Imaging Methods 1.5 cr
Basic concepts and theories behind advanced brain imaging methods will be introduced, which includes multivariate pattern analysis and machine learning. Then, students will run the learned analyses using sample data in class and in homework.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: IMED 7004.

ANAT 7014 Functional Human Anatomy 2 cr
This course is an overview of human anatomy from a functional perspective. The students will be introduced to the structure and function of neuromuscular system. The course is specifically designed for students enrolled in programs in which a background in biology and /or anatomy is not a prerequisite (e.g. biomedical engineering). May not be held with the former BME 7014.
Equiv To: BME 7014

ANAT 7060 Advanced Human Macroscopic (Gross) Anatomy 6 cr
Dissection, with special emphasis on regions relative to the research projects and interests of students concerned. Both terms.

ANAT 7250 Experimental Teratology 3 cr
Basic principles of experimental teratology in lectures, seminars, and practical work. The causes, embryological basis, and mechanisms of developmental defects will be covered.

ANAT 7320 Introduction to Scanning and Transmission Electron Microscopy 3 cr
Designed to provide general theoretical aspects of electron microscopy and practical knowledge of electron microscopic laboratory procedures. 3 hours lecture/lab per week, one term. Minimum enrollment: 5 students.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructors.

ANAT 7330 Readings in Anatomy 3 cr
Regular tutorials on selected topics in Anatomy and research related to student's research work. The tutorials will be incorporated into the Department's seminar program.

ANAT 7380 Human Developmental Anatomy (Embryology) 3 cr
Human development as it is of practical application to medical subjects.

ANAT 7392 Human Neuroanatomy 3 cr
(Laboratory required). The objective of this course is to provide an introduction to the structure and function of the nervous system from an anatomical perspective. It is intended primarily for graduate students registered in the Department of Human Anatomy and Cell Science. The course consists of a combination of lectures and laboratory sessions. The lectures will provide an introduction to the basic structure and function of the nervous system. Disorders of the nervous system will be discussed to highlight the function of different components of the nervous system. Laboratory sessions will be scheduled at regular intervals to provide students the opportunity to examine the three-dimensional structure of the nervous system.

ANAT 7400 Morphological Techniques 3 cr
Designed to develop advanced morphological techniques such as immunohistochemistry and cell culture.

ANAT 7468 Human Histology: Basic Tissues and Organ Systems 3 cr
This graduate level course commences by introducing students to the histological features of the four basic tissues composing the human body (epithelium, connective tissue, muscle, and nervous tissue). With an understanding of these fundamentals, this course next examines in depth the specialized cells composing the gastrointestinal, endocrine, circulatory, respiratory, reproductive, and urinary systems of the human body. This course is appropriate for students studying human tissues in their thesis research or students interested in building their background in the anatomical sciences for teaching purposes. May not be held with ANAT 7460, ANAT 7462, ANAT 7464, or ANAT 7466.

ANAT 7478 Human Gross Anatomy: Musculoskeletal 3 cr
This dissection-based human gross anatomy course will provide a detailed understanding of the musculoskeletal (MSK) system of the human body. Students will learn about the anatomical complexities of bones, joints, ligaments, tendons, muscles, nerves and blood vessels of the upper extremity, lower extremity, and spine regions. Common MSK disorders will also be discussed using clinical cases to highlight the relation between anatomical structures and normal human function. May not be held with ANAT 7470 or ANAT 7472.

ANAT 7480 Human Gross Anatomy: Trunk (Thorax, Abdomen, Pelvis) 3 cr
This course will provide an introduction to the structure and function of the trunk (thorax, abdomen, and pelvis) from an anatomical perspective. Using a combination of lectures, seminars, and dissection-based gross anatomy laboratory sessions, students will learn about thoracic wall anatomy and thoracic cavity contents including the heart and lung; abdominal wall anatomy and abdominal cavity contents including intestines and accessory digestive organs (liver, pancreas, and gallbladder), and spleen; and the pelvic wall and cavity anatomy in both males and females. May not be held with ANAT 7470 or ANAT 7476.

ANAT 7482 Human Gross Anatomy: Head and Neck 3 cr
This dissection-based course will provide a detailed understanding of the anatomy of the head and neck region. Students will learn about the skull and cranial cavity, muscles of the neck and face, general aspects of the brain and cranial nerves, eyes and ears, nasal and oral cavities, pharynx and larynx, glands and blood vessels of the head and neck. Common head and neck disorders will be discussed to highlight the relation between anatomical structures and normal human function. Upon completion, students will receive letter grades. May not be held with ANAT 7470 or ANAT 7476.

Human Nutritional Sciences (HNSC)

HNSC 7070 Advanced Problems in Foods 3 cr
Selected topics related to consumer acceptability of foods.

HNSC 7110 Advanced Problems in Nutrition 3 cr
Studies of selected problems and programs in community nutrition emphasizing program planning and evaluation.

HNSC 7200 Seminar in Food and Nutrition Research 3 cr
A critical study of selected topics in food and nutrition research involving oral presentations and discussions. This is a required course for all M.Sc. students in the department of Foods and Nutrition.

HNSC 7440 Protein Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the fields of protein nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7440 by the Department of Animal Science.
Equiv To: ANSC 7440

HNSC 7450 Energy and Carbohydrate Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of energy/carbohydrate nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7450 by the Department of Animal Science.
Equiv To: ANSC 7450

HNSC 7460 Lipid Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of lipid nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7460 by the Department of Animal Science.
Equiv To: ANSC 7460

HNSC 7470 Vitamin Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of vitamin nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7470 by the Department of Animal Science.
Equiv To: ANSC 7470

HNSC 7480 Mineral and Trace Element Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of mineral nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7480 by the Department of Animal Science.
Equiv To: ANSC 7480

HNSC 7490 Phytochemical Nutrition and Metabolism 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of phytochemical nutrition and metabolism, pertinent to mammalian physiology. Also offered as ANSC 7490 by the Department of Animal Science.
Equiv To: ANSC 7490

HNSC 7500 Chemistry and Function of Food Lipids 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of food lipid development, processing, analysis and function.

HNSC 7510 Flavour Chemistry and Sensory Properties of Foods 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of food flavour and off-flavour chemistry and in the mechanics of sensory assessment.

HNSC 7520 Nutraceuticals in Human Health 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in the field of nutraceuticals and the impact of food and raw materials on nutrition and human health.

HNSC 7530 Nutrition in Public Policy 1.5 cr
Focus on public policy related to the nutrition and health status of Canadians, including food and nutrition policies, health public policy, influence of trade regulations, context of health systems, social and economic environments.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor

HNSC 7540 Nutritional Epidemiology 1.5 cr
Focus on epidemiology principles and survey techniques for assessing and predicting individual nutritional status, assessing relevant community resources and reporting results to granting agencies and decision makers.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor

HNSC 7560 Current Topics in Human Nutrition 1.5 cr
Lectures and critical reviews will be used to discuss recent/significant research advances in nutrition and foods research.

HNSC 7570 Theoretical Approaches to Dietary Change Intervention 1.5 cr
Theoretical approaches to dietary behaviour change and critical analysis of their application in nutrition intervention programs for individuals and populations.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor

HNSC 7700 Applied Human Nutrition Practicum 1 6 cr
Practicum placements, and approved, diabetics-related in partial fulfillment of the Integrated Competencies for Dietetic Education and Practice. Restricted to students in the MAHN program. Course graded pass/fail.

HNSC 7710 Applied Human Nutrition Practicum 2 6 cr
Practicum placements, and approved, diabetics-related in partial fulfillment of the Integrated Competencies for Dietetic Education and Practice. Restricted to students in the MAHN program.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: HNSC 7700. Course graded pass/fail.

HNSC 7720 Applied Human Nutrition Practicum 3 6 cr
Practicum placements, and approved, diabetics-related in partial fulfillment of the Integrated Competencies for Dietetic Education and Practice. Restricted to students in the MAHN program.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: HNSC 7710. Course graded pass/fail.

HNSC 7730 Advanced Applied Human Nutrition 1 3 cr
Lectures and critical reviews in topics related to the dietetics profession, embedded an intrusion care, food provision and population health promotion. Emphasis will be placed on addressing issues impacting nutritional health of indigenous communities. Restricted to students in the MAHN program. Co-requisite with HNSC 7700.

HNSC 7740 Advanced Applied Human Nutrition 2 3 cr
Lectures and critical reviews in topics related to the dietetics profession, embedded in nutrition care, food provision and population health promotion. Emphasis will be placed on knowledge related to sustainable food systems and linkage to nutritional health. This course will develop from concepts positioned in HNSC 7730. Restricted to students in the MAHN program. Pre-requisite HNSC 7730; Corequisite with HNSC 7710.

HNSC 7750 Advanced Applied Human Nutrition 3 3 cr
Lectures and critical reviews in topics related to the dietetics profession, embedded in nutrition care, food provision and population health promotion. Emphasis will be placed on the development of leadership and advocacy skills. This course will develop from concepts positioned in HNSC 7740. restricted to students in the MAHN program. Pre-requisite HNSC 7740; Co-requisite with HNSC 7720.

HNSC 7760 Practice-Based Dietetics Research 3 cr
A practice-based research project relevant to dietetic practice, conducted within a collaborative model.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Restricted to students in the MAHN program.

Human Res. Mgmt/Indus Relat. (HRIR)

HRIR 7140 Topics in Industrial Relations/Human Resource Management 3 cr
An in-depth analysis of various topics in industrial relations and human resource management.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite or co-requisite: GMGT 7220.

HRIR 7162 Staffing 3 cr
This graduate seminar provides an understanding of the staffing function of HRM. It focuses on how recruitment, selection, performance and retention management, function within an organization to gain a competatitve advantage through the management of work and people. Pre-or
PR/CR: A minimum grade of C is required unless otherwise indicated.
co-requisite: GMGT 7220.

HRIR 7164 Training and Development 3 cr
This graduate seminar provides an understanding of the training and development functions of HRM. The course focuses on how to design, implement , and evaluate a training program, and employee development and career management.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite or co-requisite: GMGT 7220.

HRIR 7166 Compensation 3 cr
A review of the major concepts and design of compensation systems such as:strategy, external competitiveness, rewarding individual contributions, performance incentives, employee benefits, government regulations, union role in compensation, budgets and administration. Pre-or
PR/CR: A minimum grade of C is required unless otherwise indicated.
co-requisite: GMGT 7220.

HRIR 7168 The Management of Labour and Employee Relations 3 cr
An examination of the systems of labour and employee relations in Canada as it compares with the systems of other countries. Emphasis upon understanding and managing labour and employee relations in a changing economy. Not to be held with HRIR 7500. Pre-or
PR/CR: A minimum grade of C is required unless otherwise indicated.
co-requisite: GMGT 7220.
Equiv To: HRIR 7500

HRIR 7460 Collective Bargaining 3 cr
The labour management relations in the negotiation and administration of the collective agreement. The analysis of conflict and the application of bargaining theories.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or co-requisite: GMGT 7220.

Human Rights (HMRT)

HMRT 7100 Theory and Practice of Human Rights: Critical Perspectives 3 cr
This course critically analyzes, from an interdisciplinary perspective, the theory and practice of human rights as a framework for social justice. The course examines historical and current human rights struggles to better understand the potential, politics, challenges and limitations of the international human rights framework.

HMRT 7200 Selected Topics in Human Rights Research and Methods 3 cr
This seminar course will explore multidisciplinary approaches to qualitative, quantitative, legal, and/or community-based research methods, as applicable to academic human rights research and projects overseen by governmental and non-governmental organizations. particular attention will be paid to the intricacies of ethically, politically and culturally sensitive research.

HMRT 7300 Human Rights Law 3 cr
Critical and constructive study, at an advanced level, of a significant major subject or set of topics in Human Rights Law. Restrictions: Must be enrolled in one of the following programs: Faculty of Law, Master of Human Rights. This course is cross-listed with LAW 3018. Students may not hold credit for both LAW 3018 and HMRT 7300.
Equiv To: LAW 3018

HMRT 7510 Special Topics in Human Rights 3 cr
Critical and constructive study, at an advanced level, of a significant major subject or set of topics in Human Rights. Students may earn multiple credits for this course only when the topic subtitle is different.

HMRT 7800 Research paper in Human Rights 3 cr
An independent reading and/or research course on a selected topic in human rights, undertaken and arranged in consultation with the prospective instructor, upon the approval of the program director, the course content may vary. Students may earn multiple credits for this course only when the topic subtitle is different.

Icelandic (ICEL)

ICEL 7040 Advanced Icelandic 6 cr
Advanced modern Icelandic usage through translation (English-Icelandic/ Icelandic-English), practical exercises, and free composition. Study of fictional and non-fictional texts.

ICEL 7050 Individual Modern Authors 6 cr
Icelandic literature in the 20th century. Study of modern and contemporary Icelandic literature focusing on a major author.

ICEL 7060 Old Icelandic Prose: Seminar 6 cr
Study of Old Norse-Icelandic sagas focusing on a specific genre or theme.

ICEL 7070 Old Icelandic Poetry: Seminar 6 cr
Study of Old Norse-Icelandic poetry focusing on a specific genre or theme.

Immunology (IMMU)

IMMU 7000 Science Communication: Foundations & writing methodologies 3 cr
This course will provide an overview of the primary methodologies governing science communication writing.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Bachelor's Degree.

IMMU 7010 Science Communication: Audio-video methodologies 3 cr
This course will provide an overview of the primary audio-visual methodologies used for science communications.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Bachelor's Degree and Minimum grade of B in IMMU 7000.

IMMU 7020 Immunobiology 6 cr
This course provides a broad perspective of the evolving concepts of the mechanisms underlying the regulation of the immune response. Students admitted to this course will be expected to have sufficient background knowledge of general biology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: IMMU 7070 plus cognate courses in molecular biology, or by consent of instructors.

IMMU 7030 Seminars in Immunology 3 cr
Presented by senior graduate students on advanced research topics not directly related to the student's thesis subject. The purpose of this course is to test the student's ability to evaluate critically a specialized topic both orally and in an essay form. This course is graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: IMMU 7110 or IMMU 7020 or by consent of instructors.

IMMU 7040 Immunological Methodology 3 cr
This lecture course is designed to provide an understanding of modern methods used for basic research in Immunology or other biomedical disciplines utilizing immunological techniques.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: IMMU 7070 or by consent of instructors.

IMMU 7070 Introductory Immunology 3 cr
This course provides a broad survey of modern immunology, covering such topics as molecular concepts of antigenic specificity, chemistry of antibodies and their interactions with antigens and cells, regulation of the immune response, transplantation and tumor immunology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: general courses in chemistry, biochemistry and biology, or by consent of instructors.

IMMU 7090 Selected Topics in Immunology 3 cr
Assigned reading and written literature review on topics not normally covered in other IMMU courses. Course content will vary depending on the advances in the field and interests of the students.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: IMMU 7070 or IMMU 7100 or consent of instructors.

IMMU 7100 Advanced Topics in Immunology 3 cr
Lectures and assigned reading providing an advanced level understanding of the molecular and cellular mechanisms governing the immune response. The course will build on basic knowledge learned in IMMU 7070 and emphasize recent advances and recently-developing concepts in the field of Immunology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: IMMU 7070 or by consent of instructors.

IMMU 7110 Molecular Immunology 6 cr
This course covers in depth the structure, molecular biology and function of immunoglobulins, histocompatibility antigens, regulatory factors receptors and adhesion molecules on cells of the immune system; mechanisms of immunochemical reactions and the immunogenicity of antigens.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: IMMU 7070 plus undergraduate courses in organic chemistry, physical chemistry and biochemistry, or by consent of instructors.

Indigenous Studies (INDG)

INDG 7100 Seminar in Advanced Anishinaabemowin 3 cr
This course will further investigate Anishinaabemowin grammar. Various types of stories in different dialects will be used to illustrate the complexities of Anishinaabemowin. The students will translate English stories into Anishinaabemowin and will also learn to transcribe oral stories in Anishinaabemowin and translate them. Students will also be introduced to historical orthographies used in materials at HBC archives, the Manitoba Museum, and other repositories for transcribing Anishinaabemowin language in the past.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NATV 3190 or permission of the Instructor or Department Head.

INDG 7110 Major Research Paper 0 cr
Students will complete a research project under direct supervision. This is a required course for students in the MA by major research paper. This course is graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of Department Head.

INDG 7112 Indigenous Community Organization Placement 3 cr
Students will examine an Indigenous community organization as a means to attaining healthy, resilient communities. Many organizations were formed by Indigenous peoples to address local, regional and national issues to address barriers to well-being. B grade or better to pass. Course graded pass/fail.

INDG 7220 Selected Topics in Indigenous Studies 3 cr
A critical examination of issues in selected areas of Indigenous Studies designed to meet the special needs of graduate students interested in exploring interdisciplinary perspectives in Indigenous Studies. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

INDG 7230 Methodology and Research Issues in Indigenous Studies 3 cr
A review of research methods, such as oral histories, and research issues, such as ethics and intellectual property rights, within the context of Indigenous Studies.

INDG 7240 Issues in Colonization 3 cr
An examination of the factors influencing colonization, assimilation and indigenization. Explores the colonization and decolonization processes, theories of colonization and ways of promoting indigenization without assimilation

INDG 7250 Culture: Theory and Praxis 3 cr
A study of selected material in Métis, Aboriginal, or Inuit studies, designed to meet the special needs of graduate students interested in exploring interdisciplinary perspectives in Indigenous Studies.

INDG 7280 Indigenous Studies Colloquia 1 cr
Theoretical, methodological, ethical and contextual issues in Indigenous Studies are explored from the perspectives of formally and informally trained experts using a colloquia format. Students are required to attend regularly. This course is taken more than once to fulfill program requirements. Time slots to be determined the first week of September. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different. Course graded pass/fail.

INDG 7290 Seminar in Indigenous Economies 3 cr
This seminar deals with a variety of specific topics in Indigenous Economy. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

INDG 7310 Critical Theory and Indigenous Studies 3 cr
This course will assess the relevance of the concepts produced by recent social theory to the situation of Indigenous peoples and the contribution made by "fourth world" contexts to social theory. Marxism, feminism, post-structuralism, post-colonial theory, and cultural theory will be among the perspectives examined.

INDG 7320 Trauma Theory in Indigenous Writing in Canada and Australia 3 cr
This course will compare selected texts by Indigenous authors from Canada and Australia and examine them through the lens of trauma theories – those developed by Holocaust scholars but also those which draw on Indigenous worldviews.

INDG 7330 Advanced Seminar in Indigenous Research 3 cr
A team-taught seminar that provides an in-depth study of the major theoretical, methodological, and ethical issues in Indigenous research with an emphasis on the interdisciplinary scholarship of Indigenous Studies faculty.

Interdisciplinary Management (IDM)

IDM 7010 Industry Project 3 cr
Supervised study and research of a problem opportunity in business or management. Specific course requirements determined by the faculty member assigned to be the course coordinator. In addition, each project will be supervised by a faculty member expert in the area. Projects consist of written report(s) containing substantive, practical evidence and analytically structured comments, academic materials, and bibliographical references. Pass/Fail basis only.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: completion of all 600-level MBA courses (or equivalent experience) and consent of MBA program director.

IDM 7020 Managing for Sustainable Development 1.5 cr
Strategic issues related to the manager's role in sustainable development, including enterprises in the renewable and non-renewable resource sectors, life-cycle analysis, and full cost accounting. Emphasis is placed on environmental management control systems, environmental performance measurement, reporting, and the impact of environmental management on strategic management decisions.

IDM 7030 Social and Community Awareness Project 0 cr
An experiential project examining issues related to economically and/or socially disadvantaged individuals and groups with emphasis on corporate social responsibility. This course is graded pass/fail.

IDM 7040 Leadership and Personal Development Seminar 0 cr
Preparation in computer, technical, interpersonal, and team-building skills for MBA MANITOBA program. This course is graded pass/fail.

IDM 7050 International Study Trip 3 cr
A supervised international experience to examine the relationship between corporations, senior managers, and social institutions in selected countries. Examination of the interplay between culture, economic development, management systems and strategies in other countries. Emphasis upon establishment of business networks on an international basis.

IDM 7070 Fundamental Professional & Leadership Seminar 1.5 cr
Series of seminars covering fundamental topics essential for modern management including business ethics and managing diversity.

IDM 7080 Professional and Leadership Seminar 1.5 cr
Series of seminars covering fundamental topics essential for modern management including such topics as: aboriginal business, managerial law, situational leadership, creating shareholder value, developing a business plan, and career management.

IDM 7090 Interdisciplinary Management Topics 3 cr
This is a graduate-level MBA course on a very specialized topic and is offered on an infrequent basis. Course content will be an examination of specialized topics or issues which may cross-pollinate with other business related areas. The overall aim of the course is to provide solid practical knowledge about a developing subject, to understand both implications and potential applications for organizations and their leadership today and in the future. Some topics could, for example, include Global Social Enterprise, Global Sales Distribution, Channel Management, Big Data and the Corporation, Infrastructure and Real Estate, and Coaching International Teams. Students may not hold credit for IDM 709 and IDM 7092 with the same topic title.
Equiv To: IDM 7092

IDM 7092 Interdisciplinary Management Topics 1.5 cr
This is a graduate-level MBA course on a very specialized topic and is offered on an infrequent basis. Course content will be an examination of specialized topics or issues which may cross-pollinate with other business related areas. The overall aim of the course is to provide solid practical knowledge about a developing subject, to understand both implications and potential applications for organizations and their leadership today and in the future. Some topics could, for example, include Global Social Enterprise, Global Sales Distribution, Channel Management, Big Data and the Corporation, Infrastructure and Real Estate, and Coaching International Teams. Students may not hold credit for IDM 709 and IDM 7092 with the same topic title.
Equiv To: IDM 7090

IDM 7120 Executive Leadership and Responsibilities 3 cr
This course explores the nature of the challenges inherent in senior leadership. After contemplating the generic challenge of responsible executive leadership, students engage in extended dialogues with several executives concerning their experience in leading organizations with special attention to selected program themes. Not to be held with IDM 7060.
Mutually Exclusive: IDM 7060

IDM 7130 Contemporary Themes in Business 1.5 cr
This course exposes students to salient themes found in the modern business environment. Students will develop a broad appreciation for the challenges and opportunities presented by these contemporary themes (e.g. International and Emerging Markets: Sustainability: Entrepreneurship and Innovation).

IDM 7140 Co-op for Professional Graduate Programs 3 cr
Work assignment in business, industry, or government for students registered in an Asper School of Business Professional Graduate Co-operative Education Program. For Asper Professional Graduate students only.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Written permission from the Asper School of Business Professional Graduate Co-operative Education Program, IDM 5120, a current degree GPA of 3.00 or higher, and completion of at least 27 credit hours in the current degree program.

IDM 7510 Strategic Leadership and Managing Change 1.5 cr
An examination of the role of the manager as a change agent and processes associated with strategic vision and change. Analysis of factors affecting strategic decisions and how organizations adapt to their environment. Emphasis is upon the role of leaders: transformational leadership, charisma, organizational design and managing organizational culture change.

Interdisciplinary Medicine (IMED)

IMED 7004 Human Brain Imaging Methods 1.5 cr
The role of in vivo brain imaging (e.g., CT, MRI, PET, SPECT) have been rapidly increasing in the multiple disciplines that investigate the human brain in both clinical and nonclinical domains. The basic concepts, mechanisms and analytical techniques will be introduced for different imaging methods. Students will gain knowledge about what can be done and what cannot be done with each modality.

IMED 7092 Cell Biology A Introductory 3 cr
Lecture, seminar, tutorial and/or demonstration course devoted to basic structure and molecular functions of the different parts of the cell, beginning with the nucleus and concluding with the cell membrane. Topics include basic genetic inheritance principles, chromosomes and gene regulation, protein synthesis and sorting, mitochondrial functions and genetics, biochemical and electrical properties of cell membrane functions.

IMED 7094 Cell Biology B Special Topics 3 cr
Lecture, seminar, tutorial and/or demonstration course devoted to the coordination and integration of cellular functions in complex multicellular organisms. Topics include functional interactions between extracellular matrix, cytoskeletons and membranes, cell and extracellular matrix interactions, cell-to-cell communication including signal transduction mechanisms, concepts in the regulation of cell growth and cell death and pluripotent stem cells, and their relevance to normal organ/body development and malignancy.

IMED 7096 Stem Cell Biology: Introduction to the Principles of Regenerative Medicine 1.5 cr
"Stem CellBiology" focuses on current knowledge of stem cell biology and regenerative medicine. We will discuss different conceptual aspects of stem cell properties and potency with a solid coverage of fundamental concepts including stem cell niches and microenvironment. We will further highlight the importance of stem cells in relation to human diseases including cancer (cancer stem cells), spinal cord injury, stem cell modeling of neurological disorders, and transplantation. Finally, this course will have an informative session on important ethical issues surrounding embryonic stem cells. This course is suitable for a broad range of graduate students with relevant research interests in stem cell biology and regenerative medicine.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: A basic course in Biology or consent of the instructor(s).

IMED 7098 Cancer Stem Cell Concepts and Therapeutic Applications 1.5 cr
This course will introduce normal and cancer stem cell concepts, with an emphasis on the hierarchical of tumours and the diverse roles of tissue microenvironment in sculpting tumour cell phenotypes. Also, targeting of putative cancer stem cells will be discussed in the context of developing novel treatment strategies.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Undergraduate course in cell biology or consent of instructor(s).

IMED 7100 Fundamentals of Neuroscience 6 cr
An interdepartmental multidisciplinary course providing a comprehensive overview of cellular, molecular, developmental and systems neuroscience, as well as the neurobiology of disease. Emphasis will be placed on the application of the fundamental principles of neuroscience to contemporary lab research. ANAT 7270 will provide instruction in neuroanatomy and structure-function in the nervous system.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of instructor.

IMED 7104 Neural Stem Cells: Biology and Regenerative Medicine Applications 1.5 cr
This course will discuss current concepts in Neural Stem Cells from basic neurobiology (development, fate specification and maintenance) to their potential clinical applications in treating a broad range of neurological disorders through cell transplantation as well as gene and drug delivery. Neural stem cells play critical roles in the nervous system and the course is developed to build the necessary knowledge for graduate students and residents within all disciplines in neurosciences.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: By instructor approval only.

IMED 7106 Stem Cell Therapy and Tissue Engineering 1.5 cr
Stem cell therapy opens up new avenues and has the potential to provide permanent solutions to many irreversible disorders in the body. This course will discuss different aspects of stem cell mediated repair and challenges involved in taking stem cells to the clinical applications. This course will further discuss the use of biomaterials based approaches to enhance homing and engraftment of transplanted stem cells in different organs. The course will also provide an overview of current status of stem based clinical trials, regulatory requirements in clinical practice, and ethical issues that arise.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: by instructor approval only.

IMED 7110 Foundations of Scientific Teaching in Bioscience Education 1.5 cr
This course has been designed to provide doctoral students with an overview of evidence-based principles of learning and teaching, and to enable them to incorporate these principles into the scientific teaching theory, within the context of Bioscience education. The course also prepares the students, as future faculty, to think about learning and teaching as a scholarly endeavor.

IMED 7112 Fundamental Cellular Neurobiology 1.5 cr
This lecture-based course covers the fundamentals of cellular/molecular neurobiology of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

IMED 7114 Fundamental Neural Development and Plasticity 1.5 cr
This lecture-based course covers the fundamentals of development and plasticity of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

IMED 7116 Fundamental Systems Neuroscience 1.5 cr
This lecture-based course covers the fundamentals of systems based neuroscience. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

IMED 7118 Fundamental Neurobiology of Disease 1.5 cr
This lecture-based course covers the fundamental neurobiology of diseases of the nervous system. It will normally be offered on a two year cycle, and students interested in registering should contact the Course Director.

IMED 7120 Medical Biochemistry 3 cr
Biochemistry of carbohydrates, lipids, proteins and nucleic acids focused on those areas relevant to structure and function of the human body and disease processes. All students are expected to hace completed an introductory biochemistry course. The course will consist of lectures, tutorials, and assigned studies.

IMED 7130 Foundations in Human Population and Evolutionary Genetics 1.5 cr
This course will examine how human evolutionary history and sociogenetic processes have shaped contemporary patterns of genetic variation, how we can use these patterns to understand the histories and relationships of contemporary human populations, and appropriate methods to assay and interpret these genetic variation patterns.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Incoming students must have passed the graduate Medical Genetics (IMED 7170) course or its undergraduate equivalent, Introduction to Human Genetics (BGEN 3020), or equivalent course prior to taking this course.

IMED 7140 Advanced Topics in Human Population and Evolutionary Genetics 1.5 cr
This course will examine the latest genetic evidence on the origins and evolution of anatomically modern humans and their peopling of the world, the coevolution of genes and culture, and the emergence and dispersal of genetic risk factors for Mendelian and complex diseases and traits that afflict contemporary human populations.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Incoming students must have passed the Foundations in Human Population and Evolutionary Genetics (IMED 7130) or an equivalent course prior to taking this course.

IMED 7170 Medical Genetics 3 cr
Designed to introduce graduate students to the field of human genetics. Both basic science and clinical issues will be discussed in this course.

IMED 7180 Molecular Approaches in Medical Research 3 cr
For students who wish to understand advances made in medicine/biology through molecular and developmental approaches. Topics for discussion will be selected from the recent literature in consultation with participating students. The course will consist of lectures and discussions as well as written and oral presentation of papers by the students.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

IMED 7190 Medical Immunology 3 cr
This interdisciplinary courses deals with the molecular and cellular mechanisms underlying immunologically mediated human diseases.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: IMMU 7070 plus cognate courses in human biology or by consent of instructors.

IMED 7200 Cancer Biology 3 cr
Biology of cancer including genetics, biochemistry, diagnostics and therapeutics with a focus on fundamental, translational and clinical application.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: All students are expected to have completed an introductory biochemistry, cell biology or genetics course and will require consent of instructor.

IMED 7210 Epigenetics in Development and Human Diseases 1.5 cr
Emphasis on current understanding about the dynamic mechanisms that instruct when and where genomic DNA is turned on or off. We will discuss the epigenetic mechanisms that control differentiation of specialized cell types during development. Additionally, this course will highlight recent advancements on the impact of epigenetics in neurodevelopmental diseases with regards to the etiology, progression, diagnosis and treatment. In this respect, application of stem cell biologyin regenerative medicine, genome-wide genetic-epigentic strategies and gene therapy approaches will be discussed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: A basic course in biology, or consent of instructor.

IMED 7212 Introduction to the Mechanisms of Disease 3 cr
(Formerly: PATH 7020) This course introduces the student to the basic principles of disease processes, with use of case models to illustrate mechanisms. An assigned review, in conjunction with an essay and power point presentation will form part of the course. There are no course prerequisites.

IMED 7242 Nucleic Acids: Structure and Function in Normal Development and Diseases 1.5 cr
This course is designed to provide students with a basic knowledge on nucleic acids structure and function. It will highlight how DNA and RNA contribute to the mechanisms and underlying normal development as well as pathologies including cancer and genetic diseases. To be fully beneficial for the student, it is highly recommended that this course be taken together with IMED 7244.

IMED 7244 Nucleic Acids: Manipulation in Biomedical Research 1.5 cr
This course is designed to provide students with a basic knowledge on nucleic acids manipulation. It will highlight how DNA and PNA can be modified and used in Biomedical Research. To be fully beneficial for the student, it is highly recommended that this course be taken together with IMED 7242.

IMED 7280 Medical Computational Biology 3 cr
"Medical Computational Biology" provides the basic knowledge necessary for students to pursue research in the use of computational methods in biomedical research. The course will focus on concepts necessary for applying computation to genomics, transcriptomics and proteomics experimental data and their application to topics relevant to human health. This course is suitable for a broad range of students with interest in large scale biomedical research.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: a basic course in biology and mathematics or the consent of the instructor(s).

IMED 7290 Developmental Biology 3 cr
Emphasizes current principles of organ system development and its application to transgenic approaches to gene function in the context of a whole, developing organism.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: IMED 7090 or consent of instructor.

IMED 7300 Microscopy, Optics, Imaging and Analysis in Health Research 3 cr
Theory and practice of modern microscopy, optics, molecular imaging, and analyses used in health research. Participants will gain in depth knowledge through seminars by local and external experts in the field and by hands-on laboratory work in preparing samples for imaging and analyses. Images will be acquired using equipment at the Genomic Centre for Cancer Research and Diagnosis at the Manitoba Institute of Cell Biology. Students will also participate in interactive tutorials and journal club.

IMED 7302 Advanced Molecular Imaging 3 cr
Seminar course in which students will learn about innovative methods and advanced analyses of molecular imaging in biomedical research including 2-dimentional and 3-dimensional fluorescent in situ hybridization, live-cell imaging, spectral imaging, and multi-colour imaging. Students will participate in hands-on laboratory exercises, interactive tutorials and journal club.

IMED 7304 Functional Genomics and Whole Genome Analyses 3 cr
Seminar course in which students will learn about functional genomics and approaches to whole genome analyses using array technologies. Course content will be delivered by local and external experts in the field. Students will participate in hands-on laboratory exercises with micro-array platforms and computer-based data analyses, interactive tutorials and journal club.

IMED 7410 Biomedical Trainee Skills 3 cr
A course theoretical and practical instruction in scientific investigation, including research ethics, research design, data evaluation and presentation, as well as critical reviewing and preparation of applications for research funding.

Interior Design (IDES)

IDES 7000 Graduate Seminar in Interior Design 3 cr
A seminar course for students registered in thesis or practicum designed to assist in the determination of a relevant topic; formulation of a hypothesis, academic writing sources of information and the appropriate form and content of the thesis practicum.

IDES 7060 Special Studies 3 cr

IDES 7170 Design Research Methods 3 cr
Building on EVIE 3640 Design Inquiry, this course addresses the role of quantitative and qualitative research methods in interior design. The subject will address the principles of quantitative and qualitative research methodologies; focusing on the relationship between research and interior design. Specifically identifying gaps in existing research; critical analysis and interpretation of existing research; representation of research intentions, methodologies, and results.

IDES 7180 Theory Seminar 1 - Contemporary Issues in Design 3 cr
A theoretical exploration of contemporary design issues as they apply to Interior Design, supporting the work of design studio. Historical precedent in relation to human activity, sensory stimulus, technological and social change, ecological awareness, and aesthetic judgment forms the context for discussion and debate.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EVIE 3002 and EVIE 4000 or equivalent.

IDES 7190 Theory Seminar 2 - Critical Perspectives 3 cr
An examination of theoretical and philosophical approaches to design. Examines the practice of interior design through a variety of critical and historical perspectives. Different modes of thought and manners of questioning will be used to debate issues.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: EDES 7180.

IDES 7200 Masters Studio 1 - Strategic Issues 6 cr
Master Studio 1 focuses on developing strategic approaches to design, which address complex contextual issues and adaptive reuse of large-scale public space. Studio explorations responding to a range of complex contextual design issues. The studio focuses on methods of strategic analysis such as mapping and scenario planning to inform the configuration and resolution of new interior spatial forms. Large scale public space and the changing nature of contemporary culture will form the basis for the design projects.

IDES 7210 Masters Studio 2 - Events and Making 6 cr
Master Studio 2 is focused on the Event: exploring the nature of temporary inhabitation through the creation of a unique place/installation as the site for cultural/community celebration. Design/build studio explorations focused upon issues of temporality, technology, and design intention. Small-scale public places and cultural context will form the basis for design studio projects.

IDES 7220 Masters Studio 3 6 cr
Focuses on the creation of specialized interior environments informed by traditional and emerging forms of research. Research into Practice: a research-focused, problem based, studio bridging Studio 3 will examine specialized interior professional design issues and diverse research sources. Master projects in areas such as: work environments, healthcare, education or hospitality, through precedent and research. The studio may be run as a collaborative program and may be delivered as an International studio experience.

IDES 7230 Sensory Technology 4 3 cr
Examination of the influences and effects of emerging communication systems and building technologies; building and furniture systems; in the context of human well- being and environmental concerns. The study of the design consequences and environmental impact of interior services and systems; communication technologies; building regulations, codes and infrastructure; detailing and specification of projects drawn from design studio.

IDES 7240 Sensory Technology 5 3 cr
A self-directed exploration of new and/or divergent technologies, with significance to the design of interior environments. Students will propose a self-directed design or research project, nominating a full time staff advisor; for the subject instructors' approval. The proposal will clearly establish learning objectives and outcomes, and assessment criteria.

IDES 7250 Professionalism and Practice 3 cr
Introduction to the profession and practice of Interior Design; types of practice; regulating bodies; education; career development; professional and social responsibilities; examination and critique of practice, projects and design issues.

IDES 7270 Travelling Concepts in Photography 3 cr
This course is a graduate level photography elective that combines the practice, theory and history of photography. The outcome is to stimulate the use of photography as a visionary and hands-on tool. The final outcome with be an exhibition of student work.

IDES 7280 Advanced Topics in Contemporary Interior Design Seminar 3 cr
This seminar is a forum for discovering the character of current international design practices. It emphasizes the development of writing skills by exploring models for formulating criticism and applying them through a sequence of written exercises. Discussions focused on the criticism of actual spaces and published architectural environments occur.

IDES 7290 Work Experience Program 0 cr
The Work Experience Program provides 175 hours of practical experience over 5 weeks in the interior design profession. Knowledge and skills in job search techniques are developed and applied, while experience in the workplace informs expectations of practice and contributes to successful work transition upon graduation. Course graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Co-requisites: MID Studio 1 IDES 7200 and MID Studio 2 IDES 7210.

International Business (INTB)

INTB 7030 Comparative Management 3 cr
Comparative study and evaluation of management philosophy and practices in cross-cultural setting; the cultural, economic, and political environment which influence management decision-making. Not taught every year.

INTB 7032 Comparative Industrial Relations and Human Resource Management 3 cr
Equiv To: INTB 7150

INTB 7040 International Organizational Behaviour 3 cr
The examination of dilemmas and opportunities that managers face when they work in a cross-cultural setting. The purpose of this course is to develop the necessary understandings and skills to effectively manage problems arising from the interaction of people from different cultures in work settings. Not to be held with INTB 7030.
Equiv To: INTB 7030

INTB 7730 International Business 1.5 cr
Develop an appreciation of business decision-making in an international/global context. Learning activities are focused towards developing intellectual and interpersonal skills in order for managers to function more effectively in international markets.

Kinesio, Phys Ed, & Recreation (KPER)

KPER 7000 Research in Kinesiology and Recreation Studies 3 cr
Concepts and issues in designing, implementing, and disseminating research in areas broadly related to kinesiology and leisure. It is recommended that students complete this compulsory course within their first year of enrollment in the Master's program. May not be held with the former PERS 7000.
Equiv To: PERS 7000

KPER 7002 Qualitative Research Methods 3 cr
This advanced qualitative research course will expose students to the history, philosophy and epistemological background of the qualitative research tradition, its methods and application to health, physical activity and leisure. May not be held with the former PHED 7160 of the same title.
Mutually Exclusive: PHED 7160

KPER 7004 Quantitative Research Methods 3 cr
To extend the student's theoretical understanding of quantitative research designs related to the field of kinesiology and recreation management. Data management and analysis methods will be discussed. Students will gain a theoretical knowledge of common statistical tests. May not be held with the former PHED 7160 of the same title.
Mutually Exclusive: PHED 7160

KPER 7006 Mixed Methods Research in Kinesiology and Recreation Studies 3 cr
This course will explore mixed methods research approaches. Specifically, research design, data collection, analysis and interpretation will be explored.

KPER 7100 Molecular Mechanisms of Exercise Physiology I 1.5 cr
Investigating the mechanisms underlying exercise-induced adaptations in health and disease. (Part 1). Advanced level Exercise Physiology, Physiology or Animal Biology or instructor permission is required.

KPER 7102 Molecular Mechanisms of Exercise Physiology II 1.5 cr
Investigating the mechanisms underlying exercise-induced adaptations in health and disease. (Part 2). Advanced level Exercise Physiology, Physiology or Animal Biology or instructor permission required.

KPER 7200 Sensorimotor Integration: Fundamental Theories in Motor Control and Learning 3 cr
Topics covered will introduce students to the historical developments and current thinking around how humans control and learn to perform skilled action. May not be held with the former PHED 7160 "Motor Control". Kinesiology degree or permission by instructor required.
Mutually Exclusive: PHED 7160

KPER 7202 Instrumentation and Signal Processing in Human Movement Science 3 cr
Building critical analysis and application of biophysical research methods and analysis, develop numeracy skills in addition to scientific writing and oral presentation skills.

KPER 7204 Exercise Adaptations in Whole Body Physiology 3 cr
This course will cover how exercise training results in adaptations to whole body physiology. Units taught: metabolic systems; cardiovascular-respiratory systems; neuromuscular-skeletal systems; neuroendocrine systems; and immune system. Weekly discussion of topics.

KPER 7400 Humanities and Social Sciences in Exercise, Leisure, Physical Education and Sport 3 cr
This course will include the presentation of current research and scholarship on physical activity, health, and leisure from social science and humanities perspectives.

KPER 7402 Community Development: Qualitative Methods 1.5 cr
Students will be introduced to traditions in the qualitative field, explore theoretical foundations that underpin qualitative inquires and develop capacity to think critically about ethical issues involved in research processes (working with marginalized groups and conducting community-based research.

KPER 7404 Indigenous Land-Based Skills 3 cr
This course brings Indigenous cultural perspectives and practical skills to students in Kinesiology and Recreational Management in Indigenous land based learning.

KPER 7406 Social Psychology of Exercise, Leisure, Sport and Tourism 3 cr
This course will explore social psychological principles and theories and their application to the study of exercise, health, sport, leisure and/or tourism.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: REC 3180: Social Psychology of Leisure, or KPER 2540: Psychology of Sport and Exercise, or PSYC 2540: Social Psychology, or discretion of instructor.

KPER 7410 Leisure, Recreation, Parks and Tourism: Concepts and Theories 1.5 cr
Critical analysis of the dominant concepts, theories, and research associated with the development of basic and applied knowledge in fields of leisure, parks and tourism.

KPER 7420 Diversity/Disability and Inclusion Studies to Leisure, Sport, Health and Physical Education 1.5 cr
Overview of the theories/philosophies, current issues, research trends and methodological considerations in the area of diversity/disability and inclusion studies. This course focuses on scholarly approaches that promote equity, access and social inclusion in the contexts of leisure, sport, health and PE.

KPER 7430 Critical Race Theory, Indigeneity, in Leisure, Recreation and Sport 1.5 cr
This course openly discusses issues of race, racism, and settler colonialism. Students will develop an understanding of the role of praxis in CRT and Indigenous scholarship. Students will read, digest, critique, apply, and understand CRT and Indigenous scholarship.

KPER 7440 Cultural Studies in Leisure, Recreation and Sport 1.5 cr
Students will learn to use interdisciplinary critical perspectives to examine the diverse and sometimes contested meanings of cultural objects and processes, establishing a basic knowledge of the theoretical paradigms of Cultural Studies.

KPER 7450 Land-Based Education and Outdoor Recreation and Sport 1.5 cr
Current trends and research related to the social and physical implications of leisure behaviour in the natural environment.

KPER 7800 Directed Study in Kinesiology and Recreation 3 cr
Provides opportunities for in-depth individualized study within a specific area of interest. Can be completed twice (different topics) for maximum of six credits. Only 3 credits may count toward the minimum requirement of 12 credits in the FKRM Graduate Program.

KPER 7802 Directed Study in Kinesiology and Recreation 1.5 cr
This course provides in-depth individualized study and exploration within a specific, focused area of interest within a topic area pertaining to Kinesiology or Recreation Management. This course may allow students to study a topic in great detail that may be pertinent and important to their degree.

KPER 7860 Special Topics 3 cr
The study of the contemporary research and theory in a selected area. Topics will vary, depending on faculty expertise and student need.

KPER 7862 Special Topics 1.5 cr
The study of the contemporary research and theory in a selected area through consideration of relevant literature. The course may also provide opportunities for the application of theories or models within the selected topic.

Labour Studies (LABR)

LABR 7110 Advanced Topics in Labour Studies 3 cr
The course will vary from year to year depending on the needs of students and the interests of the instructor.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of the Labour Studies coordinator. As the course content will vary from year to year, students may take this course more than once for credit.

Landscape Architecture (LARC)

LARC 6150 Landscape Architecture Communication 3 cr
The objectives of this course are to promote an awareness of the diversity of graphic expression and to encourage experimentation. Students are given the opportunity to practice drawing and graphic communication skills and techniques through studio exercises.

LARC 7002 Land Construction and Professional Practice 3 cr
Introduction, investigation and fundamental exercises in landscape design and construction documentation, and construction administration for landscape construction projects.

LARC 7020 Field Studies 3 cr
A one- or two-week field study block course at the start of winter term or during mid-term break, co-requisite with winter term studios.

LARC 7040 Design Research 3 cr
The focus is on critical review of the literature, the formulation of research methods appropriate to securing, analyzing, and interpreting of research in Landscape Architecture, and the examination of approaches to design as a mode of enquiry and research.

LARC 7110 Landscape Architecture Studio 1 9 cr
An introductory study of structure and order within nature and the built environment. Instruction in the principles of design, the basic elements of graphic and spatial composition, and the vocabulary and methods of approach to landscape architectural design within a variety of contexts. The course may include an obligatory pre-term drawing workshop and a field studies trip; location and cost to be determined on a yearly basis.

LARC 7120 Special Topics in Landscape Architecture 3 cr
An assignment and conference course. A detailed study of some special topics in landscape architecture, including environmental sustainability, urban landscape technology, and housing form.

LARC 7160 Landscape Architectural Field Ecology 3 cr
Field study of plant taxonomy and ecology. Approximately two weeks duration immediately prior to the beginning of fall term. For Landscape Architecture students or with consent of department head.

LARC 7222 Landscape Architecture Studio 2 9 cr
An exploration of analytical, conceptual, and developmental aspects of urban public places in an experimental studio setting. An emphasis is placed on design as mediation between competing demands. The studio incorporates the application of three-dimensional simulation technologies in design.

LARC 7250 Landscape Architecture Theory 3 cr
Investigation of the theoretical foundations of landscape architecture in order to understand the complex nature of its practice, to identify its disciplinary boundaries, understand its multidisciplinary nature and to investigate assumptions and myths that permeate its limited discourse.

LARC 7310 Landscape Design Seminar 1 3 cr
A cross-cultural overview of significant discourses with an emphasis on the influence of critical design inquiry upon specific landscape interventions.

LARC 7320 Landscape Design Seminar 2 3 cr
An examination of the means by which ideas are expressed in and through design with a focus on modes of communication, representation and engagement.

LARC 7330 Landscape Architecture Studio 3 9 cr
The study of design application of highly complex problem domains of the urban, suburban, town site, or rural landscape.

LARC 7340 Landscape Architecture Studio 4 9 cr
Comprehensive design studio involving transition between larger scale planning/design proposals for an urban/regional area and site design; includes principles of spatial modeling.

LARC 7400 Landscape Topics 3 cr
A critical examination of an individual topical study of relevance to contemporary landscape architecture. Students may take the course more than once for credit if the sub-topic differs. Course graded pass/fail.

Latin (LATN)

LATN 6000 Latin Reading Test 0 cr
(Formerly 003.600) For graduate students in other departments which require a reading knowledge of Latin

LATN 7200 Latin Literature 3 cr
A reading course involving a selected Latin author or authors, or a set of related works. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

LATN 7210 Topics in Roman History 3 cr
This course will investigate aspects of Roman history, emphasizing different topics, sources, and theoretical approaches. Possible focuses for the course include a period of Roman history, or a particular region or province of the Roman Empire. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

Law (LAW)

LAW 7112 Graduate Legal Research and Theory 3 cr
This course introduces students to select theoretical and methodological approaches to the law. In doing so, the course moves students beyond research interests to selection of appropriate theories and methodologies that inform modern legal scholarship and the range of research methods that can be applied to legal questions. Through readings, class discussions, guest presentations, and writing assignments, students will become familiar with select theoretical and methodological approaches to the law. Through exposure to and collaborative analysis of a wide range of scholarship, students will learn about which kinds of research methods are well-suited to answering which kind of research questions, the value and limitations of different perspectives on the law. May not be held with the former LAW 7110.
Mutually Exclusive: LAW 7110

LAW 7120 Research Paper in Law 3 cr
Independent reading and/or research course on selected topic in law undertaken and arranged in consultation with the prospective instructor, upon approval of the Associate Dean (Research & Graduate Studies). Course content may vary. Students may earn multiple credits for this course only when the topic subtitle is different.

LAW 7130 Topics in Law 3 cr
An independent reading and/or research course on a selected topic in law undertaken and arranged in consultation with the prospective instructor, upon approval of the Associate Dean Research & Graduate Studies. The course content may vary. Students may earn multiple credits for this course only when the topic subtitle is different.

Linguistics (LING)

LING 7500 Linguistic Variation and Change 3 cr
Focuses on sources, causes and patterns of linguistic change, spread of changes and the resulting relationships among languages.

LING 7510 Linguistic Typology 3 cr
Highlights universals and differences in phonological, morphological and/or syntactic structures drawn from data from a wide variety of languages.

LING 7550 Phonology 3 cr
Presents a theoretical approach to current issues in phonological analysis, building and testing hypotheses about phonological data.

LING 7570 Semantic Theory 3 cr
A theoretical approach to current issues in semantics focusing on formal and logical aspects of meaning.

LING 7620 Seminar in North American Indian Languages 3 cr
The linguistic structure of a North American language or group of languages. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

LING 7630 Syntax 3 cr
Presents a theoretical approach to current issues in syntactic analysis, building and testing hypotheses about syntactic data.

LING 7650 Field Methods 3 cr
Provides practical experience in techniques for data collection, analysis and interpretation of original data, through guided work with a speaker of a language unfamiliar to students. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

LING 7920 Special Problems in Linguistic Research 3 cr
Specialized topics in linguistics. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

LING 7940 Graduate Reading and Research 1 3 cr
Independent reading and/or research on a selected topic. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

LING 7950 Graduate Reading and Research 2 3 cr
Independent reading and/or research on a selected topic. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

Management Info. Systems (MIS)

MIS 7120 Management Information Systems 1.5 cr
Helps students to develop an understanding of information systems and technology (IST) management as a critical element of organizational competitiveness. The course covers information systems strategy, IST security, sourcing, project management and governance. Not to be held with MIS 6150.
Mutually Exclusive: MIS 6150

Management Ph.D. (PHDM)

PHDM 7110 Doctoral Seminar in Management (Ph.D.) 3 cr
Examination of the philosophy of science in management and overview of management research typologies, methods, and the role of research in the practice of management.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the Ph.D. program in Management or approval by instructor.

PHDM 7140 Management Research Project 1 (Ph.D) 0 cr
Examination of research design and preparation of theoretical paper in management. This course is evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the Ph.D program in Management or approval by instructor.

PHDM 7150 Management Research Project 2 (Ph.D) 0 cr
Examination of research design and preparation of empirical paper in management. This course is evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: admission to the Ph.D program in Management or approval by instructor.

Management Science (MSCI)

MSCI 6070 Quantitative Analysis for Management 3 cr
Introduction to the use of quantitative techniques, and computers to solve management problems. Mathematical optimization models, network analysis, and probability models.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MSCI 5100.

MSCI 7140 Quantitative Analysis for Management 3 cr
Introduction to the use of quantitative techniques, and computers to solve management problems. Mathematical optimization models, network analysis, and probability models. Not to be held with MSCI 6070 OR MSCI 2150.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MSCI 5110 (or MSCI.5100).
Equiv To: MSCI 2150, MSCI 6070

MSCI 7550 Readings in Management Science (Ph.D.) 3 cr
A study of recent literature in the Management Sciences and their applications, with emphasis on new developments.

MSCI 7560 Doctoral Seminar in Management Science (Ph.D.) 3 cr
Seminars on the selected research topics of recent advances in the field of Management Science covering areas of current interests.

MSCI 7680 Mathematical Optimization Models 3 cr
A specialized course in mathematical optimization. Linear programing, integer programing, Fritz John and Kuhn-Tucker theorems, quadratic programing, nonlinear programing, duality, network analysis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OPM 7120 (or OPM 6090).

Marketing (MKT)

MKT 7010 Marketing Management 3 cr
Discussion of the marketing function and its importance to the organization. The course will focus on strategic and tactical issues related to market segmentation, positioning, targeting, product management, pricing, promotion, and distribution, both from a for-profit and not-for-profit perspective.

MKT 7080 Selected Topics in Marketing 3 cr
A study of selected areas of recent development in the field of marketing. Topics may include the marketing of services, market research, business to business marketing, marketing channel systems, personal selling or sales management, and physical distribution.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MKT 7010 or MKT 6080.

MKT 7100 Readings in Marketing (Ph.D.) 3 cr
A survey of current literature in the major areas of marketing and marketing research. Emphasis upon empirical developments as they affect the application of marketing concepts.

MKT 7110 Doctoral Seminar in Marketing (Ph.D.) 3 cr
Advanced study of marketing thought integrating the functional areas of marketing. Seminars on selected research topics and recent developments in the field.

MKT 7120 Ph.D. Seminar in Buyer Behavior (Ph.D.) 3 cr
Concepts and literature relating psychological and sociological perspectives to buyer behaviour in Marketing.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

MKT 7200 Decisions and Concepts in Marketing 3 cr
Application of the principles of marketing from a managerial viewpoint; emphasis on marketing planning, strategy, and control; and appraisal of the effectiveness of marketing activities.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MKT 7010 (formerly MKT 6080).

MKT 7210 Marketing and Competitive Behaviour 3 cr
Designed to give the student a deeper understanding of the dynamics of marketing behavior. Oriented towards theoretical conceptualizations of the problems and practices in marketing areas.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MKT 7010 (formerly MKT 6080).

MKT 7220 Seminar in Marketing 3 cr
Study of selected topics in marketing with emphasis on recent theoretical developments and their application.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MKT 7010 (formerly MKT 6080).

MKT 7232 Consumer Behaviour 3 cr
The intensive study of customer psychology associated with the development of effective marketing techniques. An in-depth knowledge of what motivates customers and the manner in which they make purchase decisions helps managers in predicting customer reactions to changes in the marketing mix and to the introduction of new products and services. Course topics first examine customers at the individual-level, and then address the interdependent aspects of consumption behavior by examining its social and cultural context.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre- or co-requisite: MKT 7010 (formerly MKT 6080).

MKT 7300 International Marketing 3 cr
A study of problems and opportunities of marketing in foreign environments. It will focus on the cultural, economic and geographical problems encountered in managing the marketing function from a Canadian manager's perspective.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: MKT 7010 (formerly MKT 6080).

MKT 7500 Readings in Marketing 3 cr
Supervised readings in one of the areas of Marketing.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: MKT 7010 (formerly MKT 6080) and at least one other graduate level marketing course.

Mathematics (MATH)

MATH 7240 Advanced Group Theory 3 cr
Representation theory of finite groups, presentations of finite and infinite groups, or other topics. May not be held with MATH 4240.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of department.
Equiv To: MATH 4240

MATH 7260 Abstract Measure Theory 3 cr
Lebesgue and abstract measures, measurable functions, convergence theorems, absolutely continuous functions, measure spaces, the Radon-Nikodym theorem, Fubini's and Tonnelli's theorems. May not be held with MATH 4260 and the former MATH 4750.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4260, MATH 4750

MATH 7270 Algebraic Topology 3 cr
This course will serve as an introduction to elements of homotopy or homology theory. May not be held with MATH 4270 and the former MATH 4230.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4230, MATH 4270

MATH 7280 Basic Functional Analysis 3 cr
Banach spaces, Hahn-Banach, open mapping and closed graph theorems, linear operators and functionals, dual space, Hilbert spaces and compact operators. May not be held with MATH 4280 and the former MATH 4750.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4280, MATH 4750

MATH 7290 Complex Analysis 2 3 cr
Conformal mappings, normal families, harmonic and subharmonic functions, Perron's family, Dirichlet problem and Green's function. May not be held with MATH 4290 and the former MATH 4710.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4290, MATH 4710

MATH 7300 Combinatorial Geometry 3 cr
Topics in combinatorial geometry, including arrangements of convex bodies, introduction to polytopes, problems in discrete geometry, repeated distances, and geometric graphs. May not be held with MATH 4300.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4300

MATH 7320 Dynamical Systems 3 cr
Techniques for the qualitative analysis of nonlinear systems of ordinary differential equations and discrete-time systems. May not be held with MATH 4320 and the former MATH 4800.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4320, MATH 4800

MATH 7330 Fundamentals of Approximation Theory 3 cr
Theoretical aspects of approximation theory: density, existence, uniqueness; direct and inverse theorems for polynomial approximation. May not be held with MATH 4330.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4330

MATH 7340 Introduction to Algebraic Geometry 3 cr
This course will introduce students to the basics of affine and projective varieties through a combination of basic theoretical tools and elementary examples. May not be held with MATH 4340.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4340

MATH 7360 Introduction to Differential Geometry 3 cr
Manifolds and submanifolds. One of: exterior calculus and Stokes' theorem, Riemannian or symplectic geometry, and Hamiltonian mechanics. May not be held with MATH 4360 and the former MATH 4730.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4360, MATH 4730

MATH 7370 Linear Algebra and Matrix Analysis 3 cr
Norms, matrix factorizations, eigenvalues/eigenvectors, theory of non-negative matrices. Applications to differential equations, math biology, numerical analysis, graph theory, etc. May not be held with MATH 4370 and the former MATH 4310.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4310, MATH 4370

MATH 7380 Mathematical Biology 3 cr
Formulation, analysis and simulation of models in math biology. Applications will be chosen from population dynamics, epidemiology, ecology, immunology and cellular dynamics. May not be held with MATH 4380 and the former MATH 3530.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 3530, MATH 4380

MATH 7390 Numerical Approximation Theory 3 cr
Computational aspects of approximation by interpolatory polynomials, convolutions, artificial neural networks, splines and wavelets. May not be held with MATH 4390.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of the department.
Equiv To: MATH 4390

MATH 7440 Numerical Analysis of Partial Differential Equations 3 cr
Finite difference method, theory of Elliptic PDEs, finite element method, iterative solution of linear systems. Emphasis will be on the error analysis. May not be held with MATH 4440 and the former MATH 8150.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4440, MATH 8150

MATH 7450 Number Theory 2 3 cr
Algebraic number theory, arithmetic geometry and analytic number theory, Diophantine equations, examples such as arithmetic of elliptic curves and Dirichlet L- functions. May not be held with MATH 4450 and the former MATH 3450.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 3450, MATH 4450

MATH 7460 Partial Differential Equations 2 3 cr
Green's function, Poisson, heat, Schrodinger and wave equations, Fourier and Laplace transforms, introduction to functional analytic techniques. May not be held with MATH 4460 and the former MATH 4810.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4460, MATH 4810

MATH 7470 Rings and Modules 3 cr
The general theory of (non-commutative) rings, modules and algebras. May not be held with MATH 4470.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of department.
Equiv To: MATH 4470

MATH 7490 Optimization 3 cr
This course, cross-listed with MATH 4490, introduces the theory and practice of optimization. Topics include unconstrained optimization (quasi-Newton's, BFGS, nonlinear conjugate gradient methods), linear programming (Simplex method, duality), nonlinear constrained optimization (optimality conditions, duality, saddle point theory, barrier and penalty methods, Slater's condition) and integer programming (branch- and-bound, cutting plane and branch-and-cut methods). Applications to calculus of variations, statistics, data science, optimal control, signal processing and neural networks are given. Some computer programming will be required. This course is especially useful for students studying Data Science. Students cannot obtain credit for both MATH 4490 and MATH 7490.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

MATH 8010 Advanced Matrix Computations 3 cr
Matrix computation, decomposition of matrices, iterative methods, sparse matrices, eigenvalue problems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: linear algebra, computing, numerical analysis, and consent of instructor.

MATH 8110 Applied Finite Element Analysis 3 cr
Theory and practice of the finite element method of the solution of partial differential equations and its application to engineering and scientific problems. It includes the h, p and h-p versions, a priori and a posteriori error estimates, adaptability and the structure of finite element software.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: numerical analysis and partial differential equations or consent of the instructor.

MATH 8140 Advanced Numerical Analysis of Differential & Integral Equations 3 cr
Continuation of MATH 4440/7440. Topics include spectral methods, time dependent equations, multigrid, domain decomposition methods, problems on infinite domains, methods for boundary integral equations, Riemann-Hilbert problems and integrable systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Permission of the department.

MATH 8210 Topics in Combinatorics 1 3 cr
Topics will be chosen from the areas of algebraic combinatorics, coding theory, design theory, enumerative combinatorics, graph theory,
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8310 Partial Differential Equations 3 3 cr
Continuation of MATH 4460/7460. Topics include functional analytic techniques for linear and nonlinear partial differential equations, conservation laws, KdV equation, singular perturbation, viscosity solutions.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: Permission of the department.

MATH 8410 Seminar in Applied and Computational Mathematics 1 3 cr
Designed to accommodate special topics in applied or computational areas of mathematics not included in other course offerings. Students are advised to consult the department as to availability.

MATH 8420 Seminar in Applied and Computational Mathematics 2 6 cr
Designed to accommodate special topics in applied or computational areas of mathematics not included in other course offerings. Students are advised to consult the department as to availability.

MATH 8430 Seminar in Mathematics 1 3 cr
Designed to accommodate special topics not included in topics courses.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8440 Seminar in Mathematics 2 6 cr
Designed to accommodate special topics not included in topics courses.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8510 Topics in Algebra 1 3 cr
Designed to accommodate special topics not included in topics courses.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8520 Topics in Algebra 2 6 cr
Topics will be chosen from the areas of associative and non-associative algebras, Boolean algebra and lattice theory, category theory, group theory, ring theory and universal algebra.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8610 Topics in Analysis 1 3 cr
Topics will be chosen from the areas of asymptotics, functional analysis, operator theory, real and complex variables, summability theory, topological vector spaces.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8620 Topics in Analysis 2 6 cr
Topics will be chosen from the areas of asymptotics, functional analysis, operator theory, real and complex variables, summability theory, topological vector spaces.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8720 Topics in Foundations 2 6 cr
Topics will be chosen from the areas of logic, model theory, recursive functions, set theory.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval by department

MATH 8810 Topics in Geometry 1 3 cr
Topics will be chosen from the areas of algebraic curves, combinatorial geometry, Euclidean geometry, fractal geometry, groups and geometrics, projective geometry.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8910 Topics in Topology 1 3 cr
Topics will be chosen from the areas of compactifications and related extensions, covering properties, rings of continuous functions, set-theoretic topology, topological groups, uniformities and related structures.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: approval of department.

MATH 8996 MSc project 1 6 cr
This is a project course exclusively for students enrolled in the Course-based MSc program. Students must submit a written report, on the order of 40 to 60 pages, which can be a survey of a topic in mathematics, for instance. This course is taken under the supervision of a faculty member. Course graded pass/fail.

MATH 8998 MSc project 2 6 cr
This is a project course exclusively for students enrolled in the teaching track of the Course-based MSc program. Students must submit a written report, on the order of 20-30 pages, which can be a survey of a topic in mathematics, for instance. In addition, students are required to teach one undergraduate course. This course is taken under the supervision of a faculty member. Course graded pass/fail.

Mech. Engineering Graduate (MECG)

MECG 7150 Conduction Heat Transfer 3 cr
Steady and unsteady state heat transfer by conduction, single and multidimensional systems. Conduction with moving boundaries and computer uses of finite difference techniques.

MECG 7160 Convective Heat Transfer 3 cr
Conservation principles and flux laws. Differential and integral equations of the boundary layer. Momentum and heat transfer for laminar and turbulent flow inside tubes and over external surfaces.

MECG 7170 Radiation 3 cr
Thermal radiation properties, blackbody radiation, heat exchange by radiation among surfaces in the presence or absence of participating media. Theory and measurement techniques, network methods, solar energy utilization.

MECG 7190 Classical Fluid Mechanics 1 3 cr
Bernoulli's equation, equations of motion, two-dimensional motion, streaming motions, aerofoils, sources and sinks, moving cylinders, theorem of Schwartz and Christoffel, jets and currents.

MECG 7200 Classical Fluid Mechanics 2 3 cr
Helmholtz motions, right linear vortices, waves. stokes stream function, spheres and ellipsoids, solid moving through a fluid, vortex motion, viscosity.

MECG 7220 Boundary Layer Theory 3 cr
Basic concepts of boundary layer and separation. Navier-Stokes equations, exact solutions. Momentum and energy equations, approximate solutions; boundary layer control, and thermal boundary layers.

MECG 7240 Turbomachinery 3 cr
Generalized flow relations in rotating machinery, velocity triangles, limitation on work done per stage and Mach number effects, vortex flow, flow in cascades, blade temperatures and stresses, performance of turbomachines.

MECG 7260 Theory of Vibrations 3 cr
The formulation of vibration problems using variational principles; matrix formulation of the free and forced vibrations of discrete and continuous systems; the effect of damping; approximate methods for solving the equations of motion; numerical techniques.

MECG 7290 Diffusion in Solids 3 cr
Diffusion equations, atomic theory of diffusion, diffusion in dilute alloys, diffusion in a concentration gradient, diffusion in non-metals, high diffusivity paths, thermal diffusion, and electrolysis in solids.

MECG 7330 Phase Transformation in Solids 3 cr
Advanced treatment of phase transformations in solids such as precipitation, eutectoid decomposition, and martensitic reactions.

MECG 7340 Corrosion and Oxidation of Metallic Materials 3 cr
Topics include the electromechanical basis of corrosion, corrosion prevention by inhibitors, alloying and heat treatment passivity, stress corrosion crackling and fatigue, crack initiation and propagation, solid state chemistry including ionic and electronic conduction, and oxidation of metals and alloys.

MECG 7350 Research Topics in Physical Metallurgy and Metal Physics 3 cr
Topics selected from recent researches in physical metallurgy and metal physics.

MECG 7370 Modern Research Techniques 3 cr
Laboratory course designed to introduce the research student to a wide variety of equipment and techniques useful in metallurgical research, discussion, and laboratory.

MECG 7380 Electron Microscopy of Materials 3 cr
Theory and practice of electron microscopy, with emphasis on the application of transmission technique to materials research.

MECG 7390 Dislocation Theory 3 cr
Description of a dislocation; the stress field around a dislocation; forces on a dislocation; dislocation reactions in crystals, dislocation multiplication, pole mechanisms, twinning, stacking fault tetrahedron. Peierls force and related topics; image forces, interactions with point defects and other topics.

MECG 7400 Solidification of Metals and Alloys 3 cr
The theory of solidification with respect to microstructure and solute distribution. Practical applications such as casting semiconductors and zone refining.

MECG 7410 Theory of Turbulence 3 cr
Development and application of statistical theories to isotropic, nonisotropic, and homogeneous turbulent fluid motion.

MECG 7420 Selected Topics in Turbulence 3 cr
An extension of MECG 7410 to investigate the specialized problems of turbulence such as space-time correlation functions and spectral transfer in constrained and unconstrained fluid flows.

MECG 7450 Biomechanics 3 cr
Topics in kinematics related to normal gait and prosthetic devices; properties of materials used for prostheses; arterial, bone, and composite materials, including design and manufacturing methods.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: ECE 2090 or consent of instructor.

MECG 7460 Topics in Heat Transfer 1 3 cr
Selected topics in heat transfer based on MECG 7150, MECG 7160, and MECH 7170. Topics will be chosen from the following: conduction with and without internal heat generation, combined mode heat transfer problems, boiling and condensation heat transfer, heat exchanger design, propulsion systems heat transfer problems, special problems in forced, free and mixed convection, and two-phase flow.

MECG 7470 Topics in Heat Transfer 2 3 cr
A continuation of certain topics of MECG 7460 to include the most recent advances in these areas.

MECG 7500 Topics in Aerodynamics 3 cr
Topics in Aerodynamics.

MECG 7600 Selected Topics in Engineering Design 3 cr
Lectures and seminars on selected advanced topics in the field of mechanical engineering design.
Mutually Exclusive: ENG 7510

MECG 7610 Engineering Properties of Polymers 3 cr
A survey of the physics of crystalline and amorphous polymers, including molecular weight distribution measurements, physics of rubber elasticity, theories of the glass transition, crystallinity measurements, crystallization kinetics, mechanical properties of crystalline and amorphous polymers.

MECG 7620 Fracture of Materials and Structures 3 cr
Griffith criterion for crack propagation, stress intensity factors, plasticity effects, experimental methods for evaluation of criteria, J-integral, crack opening displacement. Microscopic aspects, dislocations at the crack tip, cleavage fracture, nil ductility temperature. Fatigue, creep, stress corrosion cracking.

MECG 7680 Advanced Operations Research 3 cr
Formulations and algorithms for the following problems, set partitioning, set covering, clustering, location, layout, order picking, vehicle routing, vehicle scheduling. Applications of these problems to planning of manufacturing systems, scheduling of production, systems, materials handling systems and planning for warehouse and storage systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MECH 4760 or consent of instructor.

MECG 7690 Computer Integrated Manufacturing 3 cr
Basic concepts of microcomputer hardware and software with special emphasis on different manufacturing applications. These include data acquisition and analysis, machine monitoring and diagnostics, process control, robotics, machine tool control, automatic testing and quality control.

MECG 7740 Selected Topics in Robot Technology 3 cr
The role of digital computers and digital interface equipment in the control and operation of robots. Fundamentals of robot kinematics and coordinate systems. Various robotic sensing systems such as vision, tactile, proximity, ultrasonic. The selection of topics may change from time to time depending on student interest and advances in the field of robotic technology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MECH 4840 or consent of instructor.

MECG 7760 Advanced Solid Mechanics 3 cr
Selected advanced topics in solid mechanics; e.g., relationship between solid physics and solid mechanics, mechanical properties for static, low- and high-cycle fatigue, failure theories and mechanisms, theory of shell structures, numerical methods, applications.

MECG 7770 Computer-Aided Engineering 3 cr
Principles and mathematical formulation of computer-aided design, manufacturing and database management systems; related topics pertinent to computer integrated design and manufacturing systems.

MECG 7780 Selected Topics in Engineering Mechanics 3 cr
Lectures and seminars on selected advanced topics in engineering mechanics such as space dynamics, orbital mechanics and kineto-elastodynamics, current problems, implications in current research.

MECG 7790 Transport Phenomena in Porous Media 3 cr
Single and multiphase flow in porous media. Porosity, permeability, capillary pressure, relative permeability, electrical properties.

MECG 7800 Topics in Porous Media 3 cr
An extension of MECG 7790 to allow investigation of special topics; e.g., computational methods, experimental techniques, mixed transport phenomena (diffusion/dispersion, conductive/convective heat transfer), advanced concepts, etc.

MECG 7810 Computational Thermofluids 3 cr
An introduction to the solution of thermofluids problems. Computational techniques (finite difference, finite element, boundary element). Modelling of turbulent flow. Spectral methods.

MECG 7840 Systems Modelling and Simulation 3 cr
Topics may include: Models and Model Building. Mathematical Models: analytical solutions, numerical solutions, steady-state solutions. Modeling techniques: state models, linear graphs, bond graphs, transfer functions, large-scale models, linear vs nonlinear models. Simulation of Systems (discrete/continuous) on digital computers; numerical operations and algorithms. Simulation Languages (discrete/continuous) applied to analysis and design of dynamic and control systems, or, services and manufacturing systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

MECG 7850 Applied Finite Element Method 3 cr
Weighted Residuals, Boundary versus Finite Element Method, Conventional and Special elements, Equality and Inequality Constraints, Error Estimates, Self-adaptive Techniques and Mixed Formulations.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: CIVL 4240 or instructor approval.

MECG 7860 Selected Topics in Control Engineering 3 cr
Lectures and seminars on selected advanced topics in the field of systems and control that include mechanical systems, dynamics, control theory and mechatronics.

MECG 7890 M.Sc. Graduate Research Seminar 1 cr
Seminar presentation and discussion of current research topics in mechanical, industrial and materials engineering research.

MECG 7900 Ph.D. Graduate Research Seminar 1 cr
Seminar presentation and discussion of current research topics in mechanical, industrial and materials engineering research.

MECG 7910 System Design for Robots and Teleoperators 3 cr
Definitions and classification. Kinematics: transformations, forward and inverse kinematic solution methods, differential kinematic equations, motion trajectories. Dynamics: energy method vs. Newton-Euler formulation. Actuators; electric, hydraulics and pneumatics. Control: requirement and methods for control of robots and teleoperators.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: MECH 3430, MECH 3480 or equivalent.

MECG 7920 Engineering Mechanics of Composite Materials 3 cr
Brief overview of composites; constituents; properties; processing and application; micro-mechanics of reinforcement; elastic behaviour of unidirectional lamina; strength of unidirectional lamina; elastic behaviour of multi-directional laminates; stress and failure analysis of multidirectional laminates; hygrothermal effects and durability; introduction to textile composites.

MECG 7930 Advanced Non-Linear Systems Analysis 3 cr
Topics may include (i) Modelling of Constrained Dynamic Systems, including derivation of dynamic equations for constrained systems using Lagrangian equations and/or Newton-Euler equations; (ii) Advanced Stability Theories, including construction of Lyapunov functions and Lyapunov's stability control; and (iii) Introduction to Analysis of Non-smooth Systems, including Filippov's solution analysis and extended Lyapunov's stability theory to non-smooth systems. Applications to computer modelling of bipedal locomotion, analysis of robotic contact tasks and stability analysis of power systems will be addressed.

MECG 7940 Experimental Methods in Fluid Mechanics 3 cr
Topics will be chosen from: Review of fluid mechanics, combustion and turbulence theory; role of experiments; conventional measurement methods for temperature, pressure and velocity; laser-based techniques for local and global velocity measurements (Laser Doppler Anemometry (LDA), Phase-Doppler Anemometry (PDA), Particle Image Velocimetry (PIV)); other laser-based techniques for imaging and concentration measurements in reacting and non-reacting single and two-phase flows.

MECG 7950 Selected Topics for Productivity Improvement in Manufacturing 3 cr
Will address techniques that can assist North American manufacturing and improve productivity in the global market place in the 21st century. Topics include: productivity techniques, quality, cost, manufacturing control and other pertinent issues.

Medical Microbiology (MMIC)

MMIC 6010 Biological Safety 3 cr
Critical Analysis of biological safety in the research, diagnostic and hospital environment; assessment of the underlying causes of laboratory acquired infections and the administrative, engineering and personal protective control measures available; analysis of current and new bio-containment technologies, risk assessment tools, the need for scientific based decision making and the public perception versus real risk.

MMIC 7012 Fundamental Virology 3 cr
This is an introductory graduate-level course with a focus on virus gene organization, the different levels of regulated viral gene expressions, and their different replication mechanisms, covering experimental design and advanced knowledge and information on various ways in which viruses replicate in hosts and interact with cellular machinery to cause disease.

MMIC 7040 Clinical Bacteriology 6 cr
Scientific basis of routine laboratory methods used in the diagnosis of bacterial infection: specimen handling techniques; laboratory organization.

MMIC 7050 Microbial Pathogenicity 6 cr
Comparative structure of virulent and avirulent bacteria, biochemical basis of virulence; host defenses.

MMIC 7140 Clinical Parasitology 3 cr
The course will consist of a series of lectures on the epidemiology, molecular pathogenesis, clinical features, diagnosis (clinical and laboratory), treatment and prevention of human disease; each class is followed by a laboratory period in which the student obtains some practical experience.

MMIC 7160 Molecular Basis of Infection and Antibiotic Action 3 cr
Historical development, mechanism of action, principles of antimicrobial susceptibility testing and molecular and genetic basis for antibiotic resistance transfer as well as pathogenesis of infectious diseases. Prerequisite courses include Microbial Physiology or Biochemistry and at least an introductory course in Genetics and the consent of instructor.

MMIC 7170 Molecular Biology of Animal Viruses 3 cr
Lecture and conference course. Recent advances in molecular aspects of virus structure, replication, genetics, and spectrum of virus-host cell interaction.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: MMIC 7010 or consent of instructor.

MMIC 7190 Readings in Infectious Diseases 3 cr
The student will conduct an appropriate in depth literature search on three aspects of a mutually agreed topic and present the "state of the science" and a critical review of it, to the instructor. This will be done as a series of interactive sessions.

MMIC 7210 Clinical Virology 3 cr
Each group of viruses will be presented in a lecture dealing with the General Virology and taxonomy, epidemiology, clinical aspects of the diseases, laboratory diagnosis, treatment options, anti-virals' classes with their mechanisms of action as well as susceptibility testing (where applicable), and prevention (including infection control measures, chemo- and immunoprophylaxis (where applicable). The course consists of lecture and optional laboratory component (non-mandatory rotation for Graduate students only at CPL, Virus Detection and Serology sections).

MMIC 7220 The Ecology of Infectious Diseases 6 cr
Explores the study of infectious diseases in a global context from the perspective of biomedical, clinical, heath systems/services and social, cultural and environmental determinants of health and disease. The course features didactic, self-directed reading and interactive small group sessions.

Medical Rehabilitation (REHB)

REHB 7010 Neurosciences 3 cr
To provide the student with a comprehensive understanding of the neurophysiological basis of motor behaviour including: motor control mechanisms, pathophysiological correlates, and clinical manifestations of central nervous system lesions involving motorcentres.

REHB 7170 Topics in Rehabilitation 3 cr
A readings, tutorial, and/or practical course designed to provide an in-depth study of one or more rehabilitation topics to extend or acquire specialized knowledge in a particular area of interest. A subtitle will be added to the current title to reflect specialized interests.

REHB 7180 Readings in Rehabilitation 3 cr
A readings course in theory or research relevant to rehabilitation. A subtitle will be added to the current title to reflect specialized interests.

REHB 7230 Independent Study 6 cr
Over two university terms, students complete an in-depth study of evidence for practice in an area of interest which will include a review of relevant literature and the development and completion of a small scale project.

REHB 7260 Assistive Technology 3 cr
A theory and practice course designed to develop an advanced understanding of the application of technology for individuals with disabilities as a means to occupation. Particular emphasis will be on evaluating the impact and understanding the theory guiding the use of assistive technology, and developing an understanding of the contexts in which assistive technologies are used.

REHB 7280 Rehabilitation Theory and Research Design 3 cr
This is a required course in the MSc Rehabilitation Sciences degree. It focuses on quantitative and qualitative research methodologies and research designs used in rehabilitation research. Theories and frameworks central to rehabilitation research are incorporated throughout.

Microbiology (MBIO)

MBIO 7010 Graduate Seminar in Microbiology 1 3 cr
Seminars covering areas of interest to the faculty and students in the graduate Microbiology program, and current developments in the broad field of microbiology (including microbial physiology, environmental microbiology, virology, pathogenicity, genetics, molecular biology, biochemistry, biotechnology, and cell culture). Open to all qualified students by permission of the Microbiology department head.

MBIO 7020 Graduate Seminar in Microbiology 2 3 cr
Seminars covering areas of interest to the faculty and students in the graduate Microbiology program, and current developments in the broad field of microbiology (including microbial physiology, environmental microbiology, virology, pathogenicity, genetics, molecular biology, biochemistry, biotechnology, and cell culture). Open to all qualified students by permission of the Microbiology department head.

MBIO 7030 Graduate Seminar in Microbiology 3 3 cr
Seminars covering areas of interest to the faculty and students in the graduate Microbiology program, and current developments in the broad field of microbiology (including microbial physiology, environmental microbiology, virology, pathogenicity, genetics, molecular biology, biochemistry, biotechnology, and cell culture). Open to all qualified students by permission of the Microbiology department head.

MBIO 7040 Graduate Microbiology 3 cr
Topics and current developments in the field of microbiology will be covered. A combined discussion, seminar and written exam format may be used. Inquire at the department for availability.

MBIO 7050 Environmental Microbiology 3 cr
Topics and current developments in the field of environmental microbiology will be covered. A combined lecture, discussion, assignment and seminar format may be used. Inquire at the department for availability.

MBIO 7060 Microbial Interactions 3 cr
Topics and current developments in the field of microbial interactions will be covered. A combined discussion, seminar and written exam format may be used. Inquire at the department for availability.

MBIO 7070 Bioprocessing 3 cr
This course allows students with a background in either biological sciences or engineering to gain an understanding of biochemical engineering processes used to enable important chemical conversions by biological systems. Topics include bioprocessing for production of biofuels, bioplastics, and biopharmaceuticals, upstream processing technologies, fermentation and bioreactor systems, and downstream processing for product recovery. These will be related to present or potential industrial applications. This course is also offered in the Department of Biosystems Engineering as BIOE 7180. MBIO 7070 cannot be held with BIOE 7180.

MBIO 7100 Advanced Concepts in Molecular Biology 3 cr
Recent advances in the molecular basis and control of gene activity; information transfer and molecular evolution. Inquire at the department for availability

MBIO 7160 Special Problems in Microbiology 3 cr
An assignment and conference course to be taken only through consultation with the head of the department. The topics will vary, depending upon student needs and interests, and will include specialized topics not available in regular course offerings.

MBIO 7200 Macromolecular Structure Analysis 3 cr
This course introduces the principles of X-ray chrystallography as applied to the study of protein and nucleic acid structure. Protein crystallization and practical aspects of X-ray diffraction, structure determination and analysis are covered. This course is suitable for students with a background in microbiology, biochemistry or chemistry. Inquire at the department for availability.

Music (MUSC)

MUSC 7050 Bibliography and Research Methods 3 cr
The techniques of bibliography and research methods in music are studied through research projects in selected areas relevant to each student's major field of study. Skill is developed in the use of primary and secondary sources, expository writing and documentation

MUSC 7060 Advanced Diction 1 1 cr
Advanced training in rules of pronunciation, language use and translations skills in Italian and German. Lab Required.

MUSC 7070 Advanced Diction 2 1 cr
Advanced training in rules of pronunciation, language use and translations skills in French and English. Lab Required.

MUSC 7100 Proseminar in Musicology 3 cr
Survey of historiography and methodological approaches in musicology through critical examination of significant texts. Topics will include the history of the discipline, significant intellectual developments in the field, and key concepts in historical musicology and ethnomusicology.

MUSC 7120 Seminar in Musicology 3 cr
Advanced graduate seminar investigating selected topics in musicology and/or music history. The content of this course varies and may be repeated for credit only when the topic subtitle differs from one previously taken.

MUSC 7130 Seminar in Ethnomusicology 3 cr
Advanced graduate seminar investigating selected topics in ethnomusicology. The content of this course varies and may be repeated for credit only when the topic subtitle differs from one previously taken.

MUSC 7180 Ensemble 3 cr
Studio instruction and monitored pre-professional training activities in chamber music leading to the presentation of ensemble performance.

MUSC 7200 Proseminar in Music Theory 3 cr
A survey of methodological approaches in music theory and analysis, related to tonal and post-tonal music. Critical examination of significant texts and analysis of selected repertoire, highlighting connections between analysis and musical performance.

MUSC 7210 Seminar in Music Theory and Analysis 3 cr
Advanced graduate seminar investigating selected topics in music theory and music analysis. The content of this course varies and may be repeated for credit only when the topic subtitle differs from one previously taken.

MUSC 7240 Music Theory Pedagogy 3 cr
A practice-based graduate seminar on philosophies and methodologies used in teaching undergraduate music theory. Critical examination of pedagogical resources, teaching techniques, assessment, and curriculum design.

MUSC 7380 Piano Repertoire Seminar 2 cr
Advanced study of the repertoire for solo piano up to the early 20th century.

MUSC 7390 Piano Chamber Music Literature Seminar 2 cr
Advanced survey of piano chamber music.

MUSC 7400 Major Practical Study 1 3 cr
Private studio instruction and monitored pre-professional training activities in one of the following: composition, conducting, or any one of the standard instruments or voice.

MUSC 7410 Major Practical Study 2 3 cr
A continuation of Major Practical Study 1.

MUSC 7490 Advanced Piano Pedagogy 2 cr
Consideration of advanced approaches to the teaching of styles and techniques through an examination of piano repertoire.

MUSC 7520 Coaching Skills 2 cr
Advanced training in philosophies and techniques of vocal coaching including both song and operatic repertoire.

MUSC 7530 Operatic Piano 2 cr
Development of skills required of an operatic pianist, including standard Arias, operatic scores, working with conductors and developing orchestral sound. May include participation in community opera events (by audition only).

MUSC 7600 Advanced Orchestration 3 cr
Advanced practical work in orchestration for various-sized large ensembles up to and including full orchestra. Detailed study of selected scores and work on individual orchestration projects.

MUSC 7630 20th to 21st Century Piano Repertoire 2 cr
Advanced study of piano repertoire since 1900.

MUSC 7810 Electroacoustic Music 3 cr
A study of the techniques of electroacoustic music.

MUSC 7860 Topics in Music 3 cr
Course orientation will vary according to the needs and interests of students. A specific topic will be chosen for each offering of the course.

Natural Resource Management (NRI)

NRI 7070 Readings in Natural Resources Management 1 3 cr
Student planned research in an area of interest. Course syllabus designed by student and approved by NRI faculty.

NRI 7080 Readings in Natural Resources Management 2 3 cr
Student planned research in an area of interest. Course syllabus designed by student and approved by NRI faculty.

NRI 7110 Field Seminar 3 cr
Exploration of selected issues in resource and environmental studies in field settings, arranged for groups of students. This course is subject to a field trip fee.

NRI 7120 Mineral Resources Management and Policy 3 cr
This course provides an interface between managers and mineral resources, focusing on a selection of practical topics related to minerals and mining. Role of mining activities in the development process; global, national, and provincial distribution of resources; policy issues relating to environmental, economic, and political consequences of non-renewable resource exploitation.

NRI 7130 Energy Resources Management and Policy 3 cr
This course covers global energy issues, objectives, strategies, and policies, and the environmental impacts of alternative energy sources; Canadian energy issues, objectives, strategies, and policies. The course stresses the need for a sound understanding of energy issues of fundamental importance, ability to assess alternatives, appreciation of policy strategies and instruments, and the ability to formulate an energy policy for a region.

NRI 7160 Projects in Natural Resources Management 1 3 cr
Team research project in an area of interest. Application of problem-solving skills to current issues in natural resources management.

NRI 7170 Projects in Natural Resources Management 2 3 cr
Team research project in an area of interest. Application of problem-solving skills to current issues in natural resources management.

NRI 7180 Sustainable Development and Natural Resources 3 cr
An examination of the context, concepts, principles, and applications of sustainable development and natural resources at the international, national, and regional levels. Sustainable development is considered from three perspectives - environment, economy, and peoples' well-being. Particular attention is focused upon the implications of sustainable development for natural resources and environmental management. Permission of the instructor required. Students are advised to consult with Institute faculty prior to admission.

NRI 7182 Sustainability, Economics, and Natural Resources 3 cr
Economic aspects of sustainability are a critical component of sustainable development. The relationship between environment, economy, and the human dimensions of natural resources comprise the primary focus of the course. Specific topics include environmental/ ecological economics, externalities, project assessment, benefit cost analysis, the economics of renewable and non-renewable resource management and economic aspects of globalization.

NRI 7190 Natural Resources Administration and Law 3 cr
The objective of this course is to explore the legal frameworks and processes in Canada related to natural resource management. After a general review of the Canadian legal system with a particular focus on administrative law, national and international regulatory frameworks related to the ownership and disposition of specific natural resources are explored. Through class discussion, case studies and presentation, the law governing the use and development of natural resources is examined and critiqued. This course is cross-listed with LAW 3980 "Natural Resources Law."

NRI 7200 The Role of Information Management in Sustainable Resource Use 3 cr
This course reviews some of the key concepts of spatial analysis including geographic information systems, remote sensing, image processing, and cartography. The second part of the course is based on the application of these concepts to a resource management issue using a case study approach. Students will gain familiarity with the following software: Idrisi for GIS; Adobe Photoshop for image processing; and Adobe Illustrator for cartography. Classes will have three components, discussion/presentation; lecture; and lab.

NRI 7222 Human Dimensions of Natural Resources and Environmental Management 3 cr
The human dimensions of Natural Resources and Environmental Management will be considered through the following thematic units: definitions, history, and paradigms of management; intersection of science with politics, actors, groups and participatory processes; Traditional Ecological Knowledge (TEK), communications and environmental perception; institutions, common theory and adaptive co-management.

NRI 7232 Ecological Dimensions of Resource and Environmental Management 3 cr
Current concepts and theories in landscape ecology, plant and animal ecology, life-history strategies, food webs, and population and community ecology are discussed as they relate to management. Common themes throughout the course include the importance of scale, the influence of science on management, adaptive management, and critical thinking.

NRI 7242 Resource and Environmental Management Policy 3 cr
The complexity of natural resources and environmental policy formulation, implementation, and analysis is the primary focus. Specific topics include: modern state, government and policy development processes; policy community and stakeholders, and role of pressure and interest groups; policy analysis, research and evaluation are examined from a variety of perspectives. Theory and practice are linked in addressing course objectives.

NRI 7252 Environmental Management Practice 3 cr
Environmental Management systems (e.g. 14001 and Natural step), best management practices and project management. Tools: Awareness (Environmental Policy, Environmental Impacts, Risk Assessment, Life Cycle Assessment), Action (Objectives, Targets, Risk Reduction, Indicators, Monitoring, Activities), Advance (Sustainability Report, Triple Bottom Line, Environmental Audit).

NRI 7262 Master's Thesis Research Seminar 3 cr
This course will provide a practical introduction to thesis research. The core objective is to assist students in designing their research, including such tasks as considering an appropriate research paradigm, establishing researchable problems, setting goals and objectives, choosing appropriate methods, analyzing data, preparing research proposals, project administration, among other topics. Special attention will be paid to conducting interdisciplinary research in the field of natural resources management.

NRI 7280 Regional Development in Northern Manitoba 3 cr
A comprehensive examination of natural resources, socio-economic conditions, and institutional structures forms the basis for an evaluation of long-term sustainability and developmental strategies for Manitoba's North. Permission of the instructor required. Students are advised to consult with Institute faculty prior to admission.

NRI 7290 Environmental Impact Assessment 3 cr
Course is a fundamental tool of decision making regarding natural resources and the environment and will provide students with an understanding of how environmental assessment is designed, administered and operates in the field.

NRI 7302 Conservation Biology and Biodiversity Management 3 cr
The course explores management and conservation of biodiversity at the genetic, species, and ecosystem levels of biological organization, and from local to global scales. Emphasis is placed on understanding human impacts on biodiversity, critically evaluating the importance of biodiversity conservation, and political, economic, ecological, and philosophical implications and drivers of conservation.

NRI 7310 Ph.D. Thesis Research Seminar 3 cr
Designing research and methodology specific to a project; reviewing the philosophy of interdisciplinary approaches to Natural Resources and environmental management and trends in the field; analyzing appropriateness of a project with trends and directions in interdisciplinary research; conducting and administering research; communicating and disseminating results of research.

NRI 7320 Environmental Risk and Hazards 3 cr
Environmental risk and hazards are viewed in terms of complex processes of natural systems and social formation. Analysis of processes and events is assisted by theoretical formulation, development of models and examination of site- or type-specific empirical cases.

NRI 7330 Water Resources: Analysis, Planning and Management 3 cr
Considering fresh water as a resource, this course initially examines theoretical models and management approaches and practices; water supply requirement, measurements, and management; demand management; and environmental sustainability. The second part encompasses selected aspects of watershed hydrology and management; water and ecosystem health; and river basin management strategies and policies. The final part evaluates institutional arrangements and jurisdictional responsibilities; transboundary issues, opportunities and implications.

NRI 7340 Environmental Justice and Ecosystem Health 3 cr
Explores Ecosystem health and environmental justice issues to realize both the possibilities and barriers to sustainability. Risk, resource distribution and power/decision-making are analyzed across race, gender and class differences. Diverse views, theories and methods on community health consider well-being, quality of life, vulnerability and ecological integrity.

NRI 7350 Study Design and Quantitative Methods for Resource and Environmental Management 3 cr
This course addresses the quantitative analysis of environmental and natural resources data, emphasizing strong study design to prevent analytical difficulties. Focus is on preparing graduate students in environmental and resources management for dealing with the typical characteristics of environmental data, and for analyses specific to resources data.

NRI 7360 Qualitative Field Methods for Community-based Resource and Environmental Management 3 cr
The purpose of this course is to provide students with the knowledge and skills necessary to undertake qualitative research relevant to CBRM. The course will be offered in a studio format with an emphasis on student participation in a research team and the practical application of data collection procedures in field setting.

NRI 7370 Sustainable Livelihoods, Food Resources and Community Food Security 3 cr
About one third of a household's total environmental impact is related to food considering all the effects of livestock, agriculture and the food industry on water, soil and air, the overuse of fish resources, transport and packaging waste. This course analyzes sustainable livelihoods and food security/sovereignty in the food system (production, processing, marketing, etc.).

NRI 7380 Project Management in Natural Resources and Environmental Management 3 cr
This pass/fail course will provide students with a grounding in the knowledge and skills required to under take a project within a professional workplace. The core objectives of this course are to encourage critical thinking about project management and develop the skills necessary to formulate, undertake and evaluate a project in the field of NREM.

Nursing (NURS)

NURS 7110 Readings in Selected Topics 3 cr
An intensive readings course for graduate students. Topics may be selected within the general field of nursing and health research to suit the special needs and research interests of students, for example, transcultural nursing, women's health, or palliative care. Students must have a faculty member agree to advise them before registering with approval from the Associate Dean, Graduate Programs in the College of Nursing, at least one month prior to the course start date.

NURS 7120 Capstone Project 0 cr
The course - based option in the Master of Nursing Program culminates in the Capstone Project. The Capstone Project provides students with the opportunity to demonstrate the ability to analyze, interpret, apply, and communicate knowledge acquired throughout their MN Program. Course graded pass/fail.

NURS 7210 Qualitative Research Methods in Nursing 3 cr
Students will develop knowledge in qualitative research in nursing and health care, including the philosophical assumptions, theories, ethical issues, designs, methodologies, and knowledge translation strategies that are integral elements of qualitative research.

NURS 7212 Systematic Reviews: Focus on Qualitative and Observational Studies 3 cr
This course provides students with the opportunity to learn the essential steps of a systematic review and synthesis of the research literature, with a focus on qualitative and observational studies, to produce reliable evidence for health care practice.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: NURS 7220 and NURS 7210 or equivalent.

NURS 7220 Quantitative Research Methods in Nursing 3 cr
Students will apply the steps of the quantitative research process to address problems identified in nursing practice, education, and/or administration. Students will also analyze the contributions that quantitative research has made to knowledge development in nursing.

NURS 7320 Philosophy of Nursing Science 3 cr
Students will analyze nursing's theoretical and scientific evolution, and assess issues related to the role that theory and research play in a practice discipline. Emphasis will be placed upon the evaluation of conceptual and theoretical perspectives applicable to the student's chosen area of focus. May not be held with NURS 7090.
Equiv To: NURS 7090

NURS 7330 Clinical Consolidation 0 cr
This course provides the student with the opportunity to demonstrate the acquisition and integration of the knowledge, skills and attitudes commensurate with the Nurse Practitioner scope of practice in the clinical setting at the entry-level competency level. This course is evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NURS 7502.

NURS 7340 Evidence Informed Practice 3 cr
Students will evaluate evidence-informed practice and its relationship to health care delivery and policy. Basic epidemiological statistics, literature searching, systematic reviews, critical appraisal, implementation science, and health intervention evaluation are integral elements of the course.
Equiv To: NURS 7080

NURS 7352 Leadership in Advanced Practice Nursing 3 cr
Students will develop their knowledge of leadership in advanced nursing practice. Leadership theory, change management, policy development, ethical leadership, models of practice, and professional development are key elements of the course. These will be evaluated within the context of contemporary health care systems, and the legislative and fiscal environments within leadership in advanced nursing practice takes place. May not be held with NURS 7350.
Equiv To: NURS 7350

NURS 7360 Integrative Focus 6 cr
Students will integrate previous coursework within their substantive area: clinical practice, education or administration. Students develop self-directed learning goals and the faculty advisor facilitates goal development and provides guidance. Practice in their substantive area is required.

NURS 7400 Introduction to Advanced Nursing Practice 3 cr
This course will provide an overview of the Nurse Practitioner curriculum with a focus on core content, concepts, and design of learning activities. This course is graded pass/fail.
Mutually Exclusive: NURS 7462

NURS 7402 Advanced Pathophysiology and Therapeutics in Nurse Practitioner Practice 2 cr
The student will apply advanced knowledge in the pathophysiology and therapeutics underlying nursing concepts common to primary care conditions, and will integrate this knowledge to provide safe and effective clinical reasoning and prescribing practices within the scope of NP practice.

NURS 7410 Advanced Health Assessment & Diagnostic Reasoning 2 cr
This course develops advanced health assessment and critical thinking skills required of advanced practice as a nurse practitioner.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NURS 7400 Introduction to Advanced Nursing Practice.
Mutually Exclusive: NURS 7412

NURS 7412 Advanced Health Assessment 3 cr
The student will perform advanced health assessments to create differential diagnoses for well clients of all ages in the context of primary care. Emphasis is on diagnostic reasoning and clinical judgment within the Nurse Practitioner scope of practice. Not to be held with NURS 7410 and NURS 7420.
Mutually Exclusive: NURS 7410, NURS 7420

NURS 7420 Clinical Practice 1 1 cr
Within the Nurse Practitioner scope of practice, this clinical course focuses on advanced nursing practice assessment of clients of all ages in a primary care setting. This course is graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: NURS 7400 Introduction to Advanced Nursing Practice. Pre- or co-requisite: NURS 7410 Advanced Health Assessment & Diagnostic Reasoning.
Mutually Exclusive: NURS 7412

NURS 7430 Nurse Practitioner 1 6 cr
Within the Nurse Practitioner scope of practice, the student will develop advanced knowledge and skills as a primary care provider to address health issues affecting clients of all ages related to the HEENT (head, ears, eyes, nose, & throat), respiratory, and cardiovascular systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: NURS 7412.

NURS 7440 Clinical Practice 2 3 cr
Within the Nurse Practitioner scope of practice, this clinical course focuses on advanced nursing practice with clients who are experiencing health problems related to the HEENT, respiratory and cardiovascular systems. Course is graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NURS 7440 Introduction to Advanced Nursing Practice and NURS 7420 Clinical Practice 1.
Mutually Exclusive: NURS 7442

NURS 7442 Clinical Practice 1 3 cr
This course provides the student with the opportunity to demonstrate the acquisition and integration of the knowledge, skills and attitudes commensurate with the Nurse Practitioner scope of practice in the clinical setting at the beginner level. This course is evaluated on a pass/fail basis. Not to be held with NURS 7440.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre or Co-requisite: NURS 7430.
Mutually Exclusive: NURS 7440

NURS 7450 Nurse Practitioner 2 5 cr
Within the Nurse Practitioner scope of practice, the student will develop advanced knowledge and skills as a primary care provider to address health issues affecting clients of all ages related to the reproductive, hematological, and genitourinary/renal system systems. Pre- requisite: NURS 7430.

NURS 7460 Community Health: Key Components for Nurse Practitioners 1 cr
This course furthers theoretical and practical knowledge of key components of community health within primary care. The emphasis of this course is on the community as client.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: NURS 7400 Introduction to Advanced Nursing Practice.
Mutually Exclusive: NURS 7462

NURS 7462 Advanced Practice Nursing in Primary Care Settings 2 cr
The student will examine advanced nursing care in primary care settings, including population health needs, the determinants of health, ethical practice, cultural safety and social justice. Emphasis will be on the development and evaluation of evidence-informed interventions to meet the health needs of Manitobans. Not to be held with NURS 7400 and NURS 7460.
Mutually Exclusive: NURS 7400, NURS 7460

NURS 7470 Nurse Practitioner 3 5 cr
Within the Nurse Practitioner scope of practice, the student will develop advanced knowledge and skills as a primary care provider to address health issues affecting clients of all ages related to the neurological, metabolic and gastro-intestinal systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NURS 7450.

NURS 7480 Clinical Practice 3 4 cr
Within the Nurse Practitioner scope of practice, this clinical course focuses on advanced nursing practice with clients who are experiencing health problems related to the gastrointestinal, hematology, genitourinary/renal, neurology, metabolic, and reproductive systems. Course is graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NURS 7400 Introduction to Advanced Nursing Practice and NURS 7440 Clinical Practice 2.
Mutually Exclusive: NURS 7482

NURS 7482 Clinical Practice 2 4 cr
This course provides the student with the opportunity to demonstrate (the acquisition and integration of the knowledge, skills and attitudes commensurate with the Nurse Practitioner scope of practice in the clinical setting at the intermediate level. This course is evaluated on a pass/fail basis. Not to be held with NURS 7480.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NURS 7442, pre or co-requisite: NURS 7470.
Mutually Exclusive: NURS 7480

NURS 7490 Nurse Practitioner 4 5 cr
Within the Nurse Practitioner scope of practice, the student will develop advanced knowledge and skills as a primary care provider to address health issues affecting clients of all ages related to mental health, and the musculoskeletal and dermatological systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: NURS 7470.

NURS 7500 Clinical Practice 4 4 cr
Within the Nurse Practitioner scope of practice, this clinical course focuses on advanced nursing practice with clients who are experiencing health problems related to musculoskeletal, dermatological and mental health issues. Course is graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: NURS 7400 Introduction to Advanced Nursing Practice and NURS 7480 Clinical Practice 3.
Mutually Exclusive: NURS 7502

NURS 7502 Clinical Practice 3 4 cr
This course provides the student with the opportunity to demonstrate the acquisition and integration of the knowledge, skills and attitudes commensurate with the Nurse Practitioner scope of practice in the clinical setting at the proficient level. This course is evaluated on a pass/fail basis. Not to be held with NURS 7500.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NURS 7482. Pre or co-requisite: NURS 7490.
Mutually Exclusive: NURS 7500

NURS 8002 Advanced Philosophy of Nursing Science 3 cr
Through a critical evaluation of relevant concepts, paradigms, theories, and conceptual frameworks in science and nursing, students will advance their thesis endeavors.

NURS 8010 Advanced Qualitative Research for Nursing 3 cr
This course will advance the studnet's critical understanding of the philosophical foundations and application of qualitative research methods in nursing and health care. Students will engage in a critical examination of the epistemological, ethical and methodological underpinnings of qualitative research. The implications of qualitative research, and its advancement and impact on policy development in nursing and health care are integral elements of the course.

NURS 8020 Advanced Knowledge Translation & Health Care Policy 3 cr
Through critical analysis of knowledge translation and health policy frameworks, students will advance their knowledge of evidence-to-practice strategies that maximize research uptake in interprofessional, clinical, and political contexts. Students will draw on the course concepts to inform their area of research.

NURS 8030 Doctoral Student Seminars I 0 cr
A dynamic seminar series for first year doctoral students to stimulate and facilitate academic discourse,professional socialization, proposal/thesis/development, funding opportunities and integration into the professional, university and national/international community of nursing scientists and their collaborative partners. This course is evaluated on a pass/fail basis.

NURS 8040 Doctoral Student Seminars II 0 cr
A dynamic seminar series for second year doctoral students to stimulate and facilitate academic discourse, professional socialization, proposal/thesis/development, funding opportunities and integration into the professional, university and national/international community of nursing scientists and their collaborative partners. This course is evaluated on a pass/fail basis.

NURS 8220 Advanced Quantitative Research Design & Methods in Nursing and Health Care 3 cr
This course prepares doctoral students in nursing and other health related programs to expand their knowledge and skills in advanced level quantitative design and methods. Emphasis in the course is on critically appraising issues specific to the design, measurement, and analysis of data for advanced level quantitative studies in nursing and healthcare. Students will also analyze ethical and policy issues related to quantitative research designs.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: NURS 7220 or equivalent; pre- or co-requisite: CHSC 7810 statistics course or equivalent.

Occupational Therapy (OT)

OT 6100 Human Determinants of Occupational Performance 6 cr
Students study the anatomical, physiological, biomechanical, and psychosocial factors that underlie the physical, cognitive and affective components of human capacities. Content is presented in the context of understanding the relationship between human capacities and occupational performance, the ability to carry out activities and tasks of self-care, productivity and leisure throughout the lifespan.

OT 6110 Fundamentals of Occupational Therapy Theory 3 cr
Students study the foundational values and beliefs of occupational therapy, the fundamentals of occupational therapy theory, and the relationship between occupation, health and well-being. Processes and approaches that guide practice with clients of various ages and in a variety of settings are introduced.

OT 6122 Foundations of Health and Well-being 3 cr
This course explores foundational knowledge in topics essential for understanding the concepts of and influences on health and well-being. Students engage in theory based and practical activities to understand models of disability, concepts of health, social determinants of health, cultural competence and safety, power and privilege. Course evaluated on a pass/fail basis.

OT 6130 Occupational Therapy Practice Skills 1 3 cr
Through instruction, case illustration and practice laboratory sessions students are introduced to practice skills related to the occupational therapy process. Occupational therapy skills and approaches used to identify occupational performance issues are introduced and practiced. Basic assessment of physical, cognitive, and affective performance components are taught. Students participate in problem solving and basic interventions around issues of occupational performance.

OT 6142 Professionalism and Enabling Occupation 7 cr
This course introduces the principles of professionalism and therapeutic strategies to promote enabling occupations, collaborative partnerships and client-centred practice. Guided by professional documents, emphasis is placed on reflective practice, communication, and ethical and legal dimensions of practice.

OT 6190 Fieldwork Preparation 1 cr
This course provides foundational knowledge and skills required to participate effectively in the fieldwork component of the Occupational Therapy Program. Course evaluated on a pass/fail basis.

OT 6200 Basic Fieldwork 4 cr
Students are placed in practice settings for four weeks of fieldwork experience under the supervision of a registered occupational therapist(s). Experiences are offered in a wide variety of practice settings. Course evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OT 6190.

OT 6300 Analysis of Occupation 4 cr
Students examine the relationships between components of human performance and engagement in occupations. Students analyze self-care, productivity and leisure occupations to identify physical, cognitive and affective components required for function. Adapting and grading principles and methods are applied. Course evaluated on a Pass/Fail basis.

OT 6310 The Environment and Occupational Performance 4 cr
An examination of physical, social, cultural and institutional aspects of the environment and their relationship to occupational performance throughout the life span. Students will begin to identify the environment in terms of enablers and obstacles to function for individuals with variable capacities.

OT 6320 Health Conditions and Occupational Performance 4 cr
An introduction to diseases, disorders and impairments as barriers to human occupational performance including an introduction to occupational therapy management approaches to enabling function.

OT 6330 Occupational Therapy Practice Skills 2 4 cr
This course builds on OT Practice Skills 1. With a focus on practice skills related to the occupational therapy process, students gain further practice in assessment of occupational performance issues and physical, cognitive, and affective performance components. Students are introduced to assessment of environmental factors that influence occupational performance and participate in problem solving and interventions around occupational performance issues.

OT 6352 Foundations of Evidence-informed Occupational Therapy 4 cr
Students are introduced to research principles and methods used to support evidence-informed occupational therapy. Students learn to critically appraise qualitative and quantitative research to answer clinical questions and apply evidence to occupational therapy.

OT 6400 Intermediate Fieldwork 1 8 cr
Students are placed in practice settings for eight weeks of fieldwork experience under the supervision of a registered occupational therapist(s). Experiences are offered in a wide variety of practice settings. Course evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OT 6200.

OT 7542 Professionalism and Leadership in Enabling Occupation 1 4 cr
Building on the Professionalism and Enabling Occupation course, emphasis is placed on leadership using a client-centred, culturally safe and equity based approach. Integrated topics are addressed: advanced communication skills; leadership in practice and in the profession; and program development and evaluation.

OT 7560 Occupational Therapy Process 1 6 cr
Working in small group tutorials and using problem-based learning methods, students apply the occupational therapy process to selected learning scenarios within a variety of service delivery models, professional roles and practice environments.

OT 7572 Occupational Therapy Practice Skills 3 6 cr
Building on knowledge and skills learned in Occupational Therapy Skills 1 & 2, students are introduced to advanced concepts, theories and models which guide client-centred occupational therapy. Students apply theory to practice and continue to develop skills for evaluation and intervention of occupational performance issues.

OT 7600 Intermediate Fieldwork 2 8 cr
Students are placed in practice settings for eight weeks of fieldwork experience under the supervision of a registered occupational therapist(s). Experiences are offered in a wide variety of practice settings. Course evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OT 6400.

OT 7742 Professionalism and Leadership in Enabling Occupation 2 4 cr
This course builds upon previous Professionalism courses and emphasizes leadership in practice using a client-centred, culturally safe and equity based approach. Integrated sections are addressed: Leadership in Program Development and Evaluation, Client-centred Practice in Macro Environments, Leadership in Team Knowledge Translation, and Transition to Practice.

OT 7752 Critical Inquiry Research Project 6 cr
Working with an assigned faculty advisor, students complete a research study relevant to occupational therapy. Students critique the literature, plan and conduct a capstone project, and relate their findings through a process of knowledge translation.

OT 7760 Occupational Therapy Process 2 6 cr
Building on knowledge and skills learned in Occupational Therapy Process 1, students work in small group tutorials and use problem-based learning methods to apply the occupational therapy process to selected learning scenarios across the continuum of community health and new/emerging areas of practice.

OT 7772 Occupational Therapy Practice Skills 4 6 cr
Building on knowledge and skills learned in Occupational Therapy Practice Skills 1, 2 and 3, students evaluate and apply concepts, theories and models of client-centred occupational therapy. Students develop skills to select, justify, perform and interpret evaluations and interventions to address occupational performance issues.

OT 7800 Advanced Fieldwork 6 cr
Students are placed in practice settings for a six weeks of fieldwork experience under the supervision of a registered occupational therapist(s). Experiences are offered in a wide variety of practice settings. Course evaluated on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OT 7600 and all MOT academic courses.

Operations Management (OPM)

OPM 7120 Operations and Supply Chain Management 3 cr
Operations and Supply Chain Management focuses on the management of processes that transform inputs into valuable outputs within supply chains. This case method course will allow students to learn systematic ways of seeing, thinking, and managing key related processes.

OPM 7130 Supply Chain Sustainability 3 cr
This course takes a broad look at supply chain sustainability. Supply chain management includes logistics/transportation, purchasing, and a few aspects of marketing. Sustainability is a multi-dimensional concept, spanning environmental, social and economic issues. Delivery is via interactive lectures, small group discussions, and writing/presenting a sustainability term paper.

OPM 7140 Seminar in Supply Chain Management 3 cr
This graduate seminar addresses key subject areas in supply chain management, primarily via the review of recent academic literature in the field. The material is approached from an overall management perspective, with little emphasis on specific operational or mathematical techniques.

OPM 7150 Operations Strategy 3 cr
This course examines issues of operations strategy. Representative topics include the development of operational capabilities for competative advantage, capacity strategy, operations improvement, vertical integration and outsourcing, managing operating networks, and new process development.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OPM 7120 or former OPM 6090.

OPM 7160 Purchasing and Supply Management 3 cr
Purchasing and supply management are sometimes considered equal yet separate areas of business; and sometimes they are considered to be interchangeable. Purchasing is now one of the key strategic elements of an organization. The broad goal of the course is for students to better understand the strategic side of purchasing, as well as tactical approaches that support the strategy. The course builds from an initial discussion of strategic and tactical purchasing to a consideration of key processes that support the strategic goal and tactical imperative.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OPM 7120 (or the former OPM 6090).

OPM 7170 Project Management 3 cr
Topics covered in this course will include project initiating, planning, executing, monitoring and controlling, and closing. Knowledge areas such as scope, schedule, cost, risk, and HR management will be discussed. The course will make use of industrial projects for developing a strong planning and analytical approach pertinent to project management.

OPM 7180 Sustainable Lean Management 3 cr
Sustainable Lean Management will provide students with a basic understanding of the components of Sustainable Lean Management in the context of Profit, People and Plant (the triple bottom line) and the opportunity to practically apply the principles, methods and tools of Sustainable Lean Management to real problems. Sustainable Lean Management, at its core, is about systematically identifying the strategic problems of an organization and methodically solving those problems while simultaneously growing and developing the potential of people to the benefit of all stakeholders of the enterprise.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OPM 7120.

OPM 7300 Topics in Advanced Production and Operations Management 3 cr
A study of recent developments in production systems and management. Topics include systems design, plant location and layout, inventory systems planning and control.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: OPM 7120 (or OPM 6090).

Oral Biology (ORLB)

ORLB 7090 Pharmacology and Therapeutics 3 cr
A combined lecture and seminar course on the pharmacological basis of therapeutics. Special attention will be paid to drugs used commonly in the practice of dentistry, their side effects and their interaction.

ORLB 7100 Oral Microbial Ecology 3 cr
Study of principles of ecology in relation to the various ecosystems in the oral cavity. In depth examination of the taxonomic relationships of oral bacterial species. Emphasis will be placed on the growth and metabolic activities of oral bacteria which lead to successful colonization of the mouth.

ORLB 7110 Infectious Diseases and the Oral Cavity 3 cr
The description of the aetiology of microbial infections in the mouth and infections elsewhere in the body which involve oral bacteria. The control of such infections by vaccines, antibiotics and antimicrobial drugs. Treatment of infections in the immuno-suppressed, post- operative infections and nosocomial infections. The relationships of host immune system to the oral flora.

ORLB 7120 Special Problems in Oral Biology 3 cr
Each student will be required to carry out a minor research project in an area of oral biology other than that of their thesis work. The results of this project will be presented in a seminar and submitted as a written report.

ORLB 7130 Macromolecular Interactions of Connective Tissue in Health and Disease 6 cr
A comprehensive study of the macromolecular constituents of connective tissue, of their synthesis, metabolism, macromolecular interaction in health and disease, and of their regulatory mechanisms.

ORLB 7140 Cell Membrane and Cell Signaling 3 cr
This course will cover the structure and function of cell membrane receptors. The mechanisms and regulation of membrane coupled signal transduction pathways including those stimulated by oral tastants and drugs will also be covered.

ORLB 7150 MECH ORAL & MAX DIS 3 cr
This course deals with the molecular pathology of the oral cavity and maxilofacial complex.

ORLB 7162 Neurophysiology of Pain 3 cr
This course examines the peripheral and central mechanisms associated with pain. Endogenous pain control systems and the pharmacological treatment of pain will also be covered.

ORLB 7180 Recent Advances in Oral Biology 6 cr
This course is given by staff in the form of lectures and tutorials. Additional lectures may be given by visiting scientists. Students are expected to familiarize themselves with the relevant literature and are examined for an in-depth appreciation of the topics covered.

ORLB 7190 Communication Skills in Dental Research 3 cr
A course to develop written, visual and oral communication skills in scientific and clinical disciplines related to dentistry.

Pathology (PATH)

PATH 7010 Investigative Pathology 6 cr
The student will complete a supervised project in the field of anatomic and/or clinical pathology, the results to be submitted in an acceptable report. The student will be examined on his/her knowledge in the field relating to his project.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PATH 7020 or departmental consent.

PATH 7032 Pathologists Assistant Field Practicum I 4 cr
(Formerly PATH 7030) The course wiil follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.

PATH 7034 Pathologists Assistant Field Practicum II 4 cr
The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PATH 7032.

PATH 7036 Pathologists Assistant Field Practicum III 4 cr
The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PATH 7034.

PATH 7038 Pathologists Assistant Filed Practicum IV 4 cr
The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PATH 7036.

PATH 7042 Pathologists Assistant Field Practicum V 4 cr
The course will follow a format of lectures, webinars, discussions, assignments, and hands-on practical experience. The course will include rotations in the various medical laboratories associated with Pathology, which will include a one week Histopathology rotation, and two 3 month Autopsy rotations. The remainder of the time will see the student in clinical rotations in Surgical Pathology. During the rotations the student will attend various rounds and lectures associated with the departments. Course graded Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PATH 7038.

PATH 7120 Diseases of Human Organ Systems 1.5 cr
(Formerly PATH 7020) The course introduces the student to the pathology of major organ systems of the human body via lectures, assigned readings and discussion, and oral presentations. The course will provide coverage of disease mechanisms and the pathology of specific organ systems including: gastrointestinal, genitourinary, reproductive, breast, hematolymphoid, cardiovascular and respiratory systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: IMED 7212.

PATH 7130 Clinical Pathological Correlations 1 1.5 cr
(Formerly: PATH 7020) The course provides an opportunity to synthesize clinical skills and theoretical knowledge in the identification, classification, and staging of cancer with emphasis on Primary Tumor (T); Regional Lymph Nodes (N); Distant Metastasis (M) TNM staging. Course graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: IMED 7212.

PATH 7140 Clinical Pathological Correlations 2 1.5 cr
The course provides an opportunity to synthesize clinical skills and theoretical knowledge in the identification, classification, and staging of cancer with emphasis on Primary Tumor (T); Regional Lymph Nodes (N); Distant Metastasis (M) TNM staging. Course graded pass/fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PATH 7130.

Peace and Conflict Studies (PEAC)

PEAC 7010 Interpersonal Communication, Problem-Solving, and Trust-building 3 cr
Examines the role of language and communication in conflict and conflict resolution. These theoretical and practice perspectives are fundamental to the field of conflict analysis and resolution/peace studies. The role of power, gender, and culture in communication and conflict are reviewed. Theories and practical skills for successful communication, collaborative problem-solving, and trust-building are explored. This class is relevant for addressing conflicts within diverse settings.

PEAC 7020 Theories of Conflict and Conflict Resolution 3 cr
Provides an overview of the theoretical foundations of the interdisciplinary field of conflict analysis and resolution, examining macro and micro theories regarding the causes of conflicts and approaches to their resolution. Conflicts are complex and take shape on multiple, interlocking planes. The course focuses on theory and the implications of these theories for practice.

PEAC 7030 International Conflict Resolution and Peace-building 3 cr
Examines international conflict resolution and post-accord peace-building. Theories regarding the causes of international conflict are reviewed. Approaches for just and enduring resolution to international conflicts, building peace, and the promotion of a global civil society are explored.

PEAC 7040 Violence Intervention and Prevention 3 cr
Examines different definitions and types of violence from the interpersonal to the global levels (e.g., family violence, youth and gang violence, violence in the workplace, hate crimes, and war). Theories of human aggression and causes of violence, as well as approaches for violence intervention and prevention are reviewed. Theories of nonviolence are explored.

PEAC 7050 Intercultural Conflict Resolution and Peace-Building 3 cr
Examines the role of socially constructed identities and meaning in intergroup conflicts in a variety of contexts. Culture is broadly conceived to encompass a variety of identities, including differences along racial, ethnic, religious, gender, and class lines. Various models for resolution are reviewed. The nature of and ethics of intervention in cultures other than one's own are explored.

PEAC 7060 Special Topics in Peace and Conflict Studies 1 3 cr
The topics addressed in this course will vary depending on faculty expertise and student need. Topics could include but will not be restricted to: "Gender and Conflict;" "Storytelling: Identity, Power and Transformation;" "Ethnic Conflict Analysis and Resolution;" "Children and War;" "Peace Education;" "Transformational Conflict Resolution;" "Role of Religion in Conflict and Peace."

PEAC 7070 Special Topics in Peace and Conflict Studies 2 3 cr
The topics addressed in this course will vary depending on faculty expertise and student need. Topics could include but will not be restricted to: "Gender and Conflict;" "Storytelling: Identity, Power and Transformation;" "Ethnic Conflict Analysis and Resolution;" "Children and War;" "Peace Education;" "Transformational Conflict Resolution;" "Role of Religion in Conflict and Peach."

PEAC 7110 International Human Rights and Human Security 3 cr
This course examines the shift in focus from state security to people. Human security is a bridge between the inter-related fields of development, human rights and conflict resolution. The course explores how these efforts at exploring the human condition can best be understood and applied.

PEAC 7120 Peacebuilding and Social Justice 3 cr
This course examines the role of peacebuilding in short term crisis intervention and longer term conflict transformation processes. Social justice is addressed at the systems level as it impacts the achievement of sustainable reconciliation. Crisis management in conflict settings, the root causes of conflict and its prevention are explored.

PEAC 7122 Dispute Systems Design 3 cr
Examines the role of conflict resolution within organizations and diverse settings (workplace, schools, communities, multiparty conflicts, international conflicts). The course focuses on analyzing how conflict is built into organizational structures and systems, and redesigning the system to produce effective human centres relations.

PEAC 7124 Gender, Conflict and Peacemaking 3 cr
Examines the role of gender in conflict and peacemaking in areas of armed conflict. Women tend to be impacted and respond to conflict in ways different from men. The course explores the theoretical and practical contributions of women activists, peace researchers and educators have made toward understanding the role of gender

PEAC 7126 Ethnic Conflict Analysis and Resolution 3 cr
Examines theories of ethnic conflict and the intervention methods used by states, international organizations and conflict resolution and peace practitioners to analyze, manage and resolve ethnic conflicts. Case studies are used to explain conflict analysis and resolution and peacebuilding.

PEAC 7128 Storytelling: Identity, Power and Transformation 3 cr
Examines the role of narrative and storytelling in conflict resolution, theory, research and practice. The relationship between language and power and destructive or constructive relationships is explored. The use of storytelling-based projects as a means of peacebuilding and community building are explored.

PEAC 7230 Gender, Conflict and Peacemaking 3 cr
Examines the role of gender in conflict and peacemaking in areas of armed conflict. Women tend to be impacted and respond to conflict in ways different from men. The course explores the theoretical and practical contributions women activists, peace researchers and educators have made toward understanding the role of gender.

PEAC 7240 Indigenous World Views and Approaches to Peacebuilding 3 cr
Examines indigenous models of peacebuilding from community level to national level. Emphasis is placed on restorative processes fundamental to cohesive relationships with others. This is achieved through ceremony, empathy, compassion, conflict resolution and restoration part of the peacebuilding models of indigenous peoples.

PEAC 7250 Restorative and Social Justice 3 cr
Examines the principles of restorative justice, the theoretical foundations of the restorative justice movement, and the development of new restorative justice programs. Restorative justice healing, re-integration and reconciliation are explored in a variety of contexts, including colonized and postcolonial indigenous communities.

PEAC 7260 Peace Education 3 cr
Examines the role of peace education as students seek to make sense of complicated and perilous events in their society. The course provides students with a background in the area of social justice, peace studies and conflict resolution.

PEAC 7280 Children and War 3 cr
Examines the impact of international war, civil war, and genocide on young people. The role of gender, class, and culture are explored; as well as the role of peacemakers, governments, and communities for addressing these issues. The implications for both the political socialization of children as well as how young people may be actors in political solutions will be explored.

PEAC 7300 Special Topics 1: Children and War 3 cr
Examines the impact of international war, civil war and genocide on children. Today's children are tomorrow's world citizens, and their events will shape the future in unforeseeable ways. Young people are socio-economic and political agents, expressive through violence, peace work and other creative forms.

PEAC 7400 Special Topics 2: Directed Readings in Peace and Conflict Studies 3 cr
This course is designed for MA students in Peace and Conflict Studies. Course requirements including readings and assignments will be selected and developed by the Professor in conjunction with the students' interests.

PEAC 7500 Practicum 3 cr
Students develop awareness of theoretical knowledge, practice skills and abilities necessary for intervention in community, group and organizational conflicts at a practicum site. Students integrate theory and experiential learning into practice to analyze the conflict, during the intervention, and post intervention reflection.

Pediatrics

PEDS 7010 Introduction to Biostatistics in Child Health Research 3 cr
In this 3-week intensive course, students will be introduced to biostatistical theory and examples from pediatrics. Mornings will be spent in didactic lectures. In the afternoons, students will have the opportunity to practice biostatistical analyses in a lab setting. Required acceptance to the Pediatric Graduate Program and PHIA (both Shared Health and U of M).

PEDS 7020 Introduction to Research Methods 3 cr
Students will learn from methods experts in qualitative and quantitative methods, systematic reviews and bioinformatics, and who lead cutting edge pediatric research in Manitoba. Assignments are designed to be of practical use. There will be one cumulative final take home exam.

PEDS 7030 Equity, Diversity and Inclusion for Professionals 0 cr
In this half day course, students learn about the importance of promoting and supporting a community that embraces equity and inclusion for all, and builds upon the strengths of diversity. Students will also be encouraged to consider their own biases. Course graded pass/fail.

PEDS 7040 Introduction to a Clinical Environment 0 cr
In this half day course, non-clinical students will be introduced to a real or simulated clinical learning environment that align with their areas of study. Pre-requisites include completion of TCPS and PHIA, and approval of advisor. Course graded pass/fail.

PEDS 7050 Ethics and Equity in Child Health Research 3 cr
Students will learn that children are not small adults, but have unique considerations and conditions. Students will also develop an appreciation for social disparities that exist within pediatric populations in Manitoba, and learn from experts who work with these communities.

PEDS 7060 Considerations in the Delivery of Virtual Care in Pediatrics 0 cr
The COVID-19 pandemic propelled virtual healthcare delivery forward. This course covers hands-on practical and ethical issues of virtual pediatric healthcare delivery. Approval of instructor required. Course graded pass/fail.

PEDS 7070 Reflexive Practice in Patient Engagement 0 cr
Students will discuss project patient engagement activities that will inform their thesis writing and knowledge translation.

PEDS 7080 Indigenous Child Health 0 cr
In many Indigenous cultures around the globe, children are considered sacred and spiritual. This is true for First Nation people in Manitoba. Indigenous Knowledge Keepers will share how cultural losses have impacted the health of Indigenous children This required course is pass/fail.

PEDS 7110 Directed Readings in Pediatric Literature 3 cr
In this individualized directed readings course, the student and instructor will work together to identify areas of interest directly relevant to the student's thesis, in order to advance the student's knowledge of the topic.

PEDS 7120 Foundations in Bioinformatics 3 cr
This course is intended to familiarize students with the field of bioinformatics. A broad overview of the 'omic fields, such as genomics, transcriptomics, and proteomics and common technologies, such as next generation sequencing, mass spectrometry, and NMR will be provided. Additionally, there will be discussion of the computational challenges of algorithm development, automation, and statistical analysis, particularly as it applies to the data consumer and an introduction to the Python programming language.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PEDS 7010, PEDS 7020, or permission of the instructor.

PEDS 7130 Multidisciplinary Immersion in Clinical Research 1.5 cr
Students not in the clinical pillar will spend 3 weeks in a clinical environment during which they will learn about clinically-relevant topics and concerns related to their area of study. The course follows an individual program of study. Required if not in clinical pillar.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: PEDS 7010, PEDS 7020, PEDS 7050, and instructor permission.

PEDS 7140 Practical Epidemiology 6 cr
In this online course, students will use data from the CHILD cohort to develop a manuscript from idea to submission. Students will analyse their own data. Prerequisite PEDS 7010 or equivalent and permission of instructor.

PEDS 7150 Multidisciplinary Immersion in Basic Sciences 1.5 cr
Students not in the basic sciences pillar will spend 3 weeks in a basic sciences lab during which they will learn about techniques, methods and analyses related to their area of study. Required for students outside the basic sciences pillar.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

PEDS 7160 Multidisciplinary Immersion in Population Health 1.5 cr
Students not in the population health pillar will spend 3 weeks with a population health group, during which they will learn about methods and analyses and related topics. Required for students outside population health pillar.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

PEDS 7170 Multidisciplinary Immersion in Policy and Practice 1.5 cr
Students not in the policy and practice pillar will learn about healthcare policy as it relates to ethics, government, and medical education.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisites: PEDS 7010, PEDS 7020, PEDS 7050, and permission of instructor.

PEDS 7180 Practical Qualitative and Mixed Methods 3 cr
Students will learn and actively practice qualitative data collection and analysis, and compare qualitative and mixed methods research.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisites: Acceptance into the Pediatric Graduate Program; PEDS 7010 (or comparable); PEDS 7020 (or comparable); permission from the instructor.

PEDS 7190 Medical Education, Ethics, and Engagement 3 cr
Students will gain theoretical and practical knowledge in medical education and ethics, as well as discuss practical ways to engage with policy makers and the popular press. Emphasis will include application of medical education methods. The course will be taught using team-based learning.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisites: PEDS 7030 and PEDS 7050; permission of instructor.

Pharmacology (PHAC)

PHAC 7042 Cardiovascular Regulation and Drug Action 2 1.5 cr
The normal homeostatic regulation of the cardiovascular system, its modification by drugs, and the sites and characteristics of drug actions affecting the cardiovascular system.

PHAC 7062 Drug Distribution, Metabolism and Excretion A 1.5 cr
The mechanisms by which the body handles the absorption, distribution and elimination of drugs and the impact this has on biological response.

PHAC 7064 Drug Distribution, Metabolism and Excretion B 1.5 cr
The mechanisms influencing the absorption, distribution and elimination of drugs from the body and their impact on pharmacodynamic and pharmacokinetic properties.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHAC 7062 or its equivalent.

PHAC 7110 Topics in Pharmacology 6 cr
(Formerly 089.711) Short research projects on various properties and effects of newer drugs. Presentation of oral and written reports by graduate students on research conducted. Open only to graduate students in Pharmacology.

PHAC 7136 General Pharmacology 3 cr
General pharmacological principles including pharmacodynamics of the more important groups of drugs, the factors which control and modify their effects, and the basis for rational selection and administration of drugs in the treatment of common diseases.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of department.

PHAC 7162 Neuropharmacology 1.5 cr
A broad sample at the graduate level of the pathophysiology, pharmacological treatments, and current research related to common neurological disorders. These will be didactic lectures followed by discussion of current topics in neuropathology and neuropharmacology.

PHAC 7164 Pharmacology Grant Writing Course 1.5 cr
The objective of this course is to teach students how to formulate, write, and present a professional research grant on the subject of their pharmacology graduate research. Students will be required to write and present a research grant under the close supervision of the course director.

PHAC 7180 Recent Advances in Pharmacology 3 cr
Lectures given by staff, followed by group discussions on current research, new developments in drugs and re-evaluation of currently employed drugs, their mechanism of action, etc. Three hours per week both terms. Open only to graduate students in Pharmacology.

PHAC 7190 Pharmacokinetics of Drug Disposition 3 cr
Lectures and problem-solving sessions directed at appropriate modelling of the disposition of drugs in the body.

PHAC 7212 Clinical Trial A 1.5 cr
Evaluate the essential elements of clinical trials as the basis for determining the potential value of interventions advocated for the treatment of diseases in humans. Topics include designing a study question, types of clinical trial designs, methods for randomization, sample size calculations, and ethics. The format will include assigned readings, lectures, discussion and assignment preparation.

PHAC 7214 Clinical Trial B 1.5 cr
Evaluate the essential elements of clinical trials as the basis for determining the potential value of interventions advocated for the treatment of diseases in humans. Topics include recruitment, baseline assessment, reporting morbidity and mortality, data collection, and survival analysis. While it is suggested that PHAC 7212 is taken before PHAC 7214 since there is a natural progression of information, it is not required that both courses are taken.

PHAC 7222 Molecular Pharmacology 2 3 cr
Lectures, seminars and selected readings on the mechanism of action of therapeutic and recreational drugs. This course covers 6 major themes: G-protein coupled receptors; Ion channels; Transporters; Lipid signaling; Tyrosine kinase receptors and tyrosine kinase-associated receptors.

PHAC 7230 Fundamental in Pharmacology for Health Care I 3 cr
This course will build on foundational knowledge of human physiology and examine basic pharmacokinetic (drug metabolism) and pharmacodynamic (drug action) principles of specific drug classes related to the autonomic nervous system, cardiovascular system (edema, hypertension, arrhythmia, angina, blood clotting, heart failure, hyperlipidemia), diabetes, thyroid, inflammation and pain. Remaining major drug classes will be covered in PHAC 7240. Students may take one or both courses. Taking both courses must be done in the same academic year (Sept to April) or with permission from the Department Head. Course delivery will involve lectures followed by clinical case-based tutorials.

PHAC 7240 Fundamentals in Pharmacology for Health Care II 3 cr
This course will build on foundational knowledge of human physiology and examine basic pharmacokinetic (drug metabolism) and pharmacodynamic (drug action) principles of specific drug classes related to the central nervous system (depression, psychosis, anxiety, epilepsy, movement disorders (e.g. Parkinson's)), infection (bacterial, viral, fungal), cancer, asthma, allergy, osteoporosis, gastrointestinal system, reproduction and special topics (pregnancy, geriatrics, drugs of abuse). Remaining major drug classes will be covered in PHAC 7230. Students may take one or both courses. Taking both courses must be done in the same academic year (Sept to April) or with permission from the Department Head. Course delivery will involve lectures followed by clinical case-based tutorials.

Pharmacy (PHRM)

PHRM 7080 Biopharmaceutics and Relevant Pharmacokinetics 3 cr
Lecture course on biopharmaceutics with particular emphasis on the application of pharmacokinetic principles in the design of conventional and sustained-release drug dosage forms, assessment of drug bioavailability, and selection of dosage regimens.

PHRM 7102 Pharmacoepidemiology 3 cr
This course will enable students to develop expertise in study designs applicable to pharmacoepidemiology. Sources of data, including automated databases, analytical methodologies and special issues in pharmacoepidemiology will be discussed.

PHRM 7120 Medical and Scientific Writing 3 cr
Lectures and exercises on the preparation of medical and scientific manuscripts, including papers for publication or oral presentation, progress reports, reviews, short papers, grant applications and similar projects.

PHRM 7130 Novel Drug Delivery Systems 3 cr
Advanced course dealing with the role of drugs and drug products in the treatment of disease with emphasis on pharmaceutics and physical pharmacy. Current and future status of drug delivery systems, their design and evaluation will also be examined.

PHRM 7160 Pharmacy Seminar 1 MSc 3 cr
Seminars and lectures on selected topics in pharmacy. Students are required to present both oral and written reports on research topics.

PHRM 7170 Pharmacy Seminar 2 MSc 3 cr
Lectures and group discussions on recent developments in pharmaceutical fields. Students are required to give an oral presentation. **PR/CR: A minimum grade of C is required unless otherwise indicated.** Prerequisite: PHRM 7160.

PHRM 7180 Pharmaceutical Implications of Biotechnology 3 cr
Introduction to biotechnology in pharmaceutical sciences and pharmacy. Students will be introduced to concepts from molecular biology, immunology, biotechnology and pharmacogenomics. Implications of biotechnology in pharmaceutical biopharmaceutical research.

PHRM 7202 Advanced Topics in Pharmacoepidemiology - Level 1 3 cr
Reserved to M.Sc. students in Pharmacy seeking a concentration in Pharmacoepidemiology. Students must have obtained approval for their thesis proposal in pharmacoepidemiology before enrolling in PHRM 7202. Advanced topics regarding study design and analytical methodology in pharmacoepidemiology are discussed. Prerequisite PHRM 7102 (or equivalent).

PHRM 7260 Pharmacy Seminar 1 PhD 3 cr
Seminars and lectures on selected topics in pharmacy. Students are required to present both oral and written reports on research topics.

PHRM 7270 Pharmacy Seminar 2 PhD 3 cr
Lectures and groups discussions on recent developments in pharmaceutical fields. Students are required to give an oral presentation. **PR/CR: A minimum grade of C is required unless otherwise indicated.** Prerequisites: PHRM 7260 or PHRM 7160 if the student direct transfers from M.Sc.

PHRM 7302 Advanced Topics in Pharmacoepidemiology - Level 2 3 cr
Reserved to Ph.D. students enrolled in Pharmacy and seeking a concentration in Pharmacoepidemiology. Students must have obtained approval for their thesis proposal in pharmacoepidemiology before enrolling in PHRM 7302. Advanced topics regarding study design and new analytical methodology in pharmacoepidemiology are discussed. Prerequisite PHRM 7102 (or equivalent).

Philosophy (PHIL)

PHIL 7110 Graduate Seminar 6 cr
Not currently offered.

PHIL 7120 Graduate Reading 1 3 cr
A reading course for graduate students in philosophy. Subject matter may be arranged to suit the special needs and interests of students; the course might, for example, be devoted to modal logic, or the free will problem, the ontological argument, phenomenology, the philosophy of W.V. Quine, etc. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7130 Graduate Reading 2 3 cr
A reading course for graduate students in philosophy, similar to PHIL 7120. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7140 Epistemology 3 cr
A study of selected topics in epistemology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7160 Metaphysics 3 cr
A study of selected topics in metaphysics. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7180 Graduate Reading 3 3 cr
A reading course for graduate students in philosophy, similar to PHIL 7120. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7190 Graduate Reading 4 3 cr
A reading course for graduate students in philosophy, similar to PHIL 7120. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7200 Topics in Ethics 1 3 cr
Basic topics in moral theory. Readings will include contemporary articles and books. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7210 Topics in Ethics 2 3 cr
Basic topics in moral theory. Readings will include contemporary articles and books. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7230 Topics in Logic and the Philosophy of Logic 2 3 cr
Selected topics in mathematical logic, inductive logic, the philosophy of logic, and the methodology of the natural and formal sciences. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PHIL 7400 Independent Research Paper 1 0 cr
This course is for students taking Option B in the M.A. program in Philosophy. The student will supply a paper with original research under the guidance of the research paper advisor. Course graded Pass/Fail.

PHIL 7410 Independent Research Paper 2 0 cr
This course is for students taking Option B in the M.A. program in Philosophy. The student will supply a paper with original research under the guidance of the research paper advisor. Course graded Pass/Fail.

Physical Therapy (PT)

PT 6100 Foundations of Physical Therapy 5 cr
Through lecture, labs and seminars, students are introduced to the theory of physical therapy knowledge, skills, attitudes and behaviours. Course content includes conceptual frameworks, principles surrounding safe and ethical professional conduct in the current health care environment. Course is graded pass/fail.

PT 6110 Foundations to Evidenced-Based Practice 1 1 cr
Students will learn to critically evaluate the evidence for physical therapy practice and rehabilitation and will be challenged to become involved in contributing to the evidence for their future practice.

PT 6124 Physical Therapy and Hospital Based Care 4 cr
Through lecture, tutorial and laboratory sessions, students learn the role of physical therapy in hospital settings. Students will learn knowledge, skills and behaviours which support physical therapy assessment and treatment.

PT 6130 Applied Sciences for Physical Therapy 1 4 cr
Through lecture, tutorial and laboratory sessions, students will learn the application of exercise and pain physiology to body structure and function and how it relates to activity and participation.

PT 6140 Neuromusculoskeletal Anatomy for Physical Therapy 3 cr
Through lecture and laboratory sessions, students learn detailed musculoskeletal anatomy of the upper and lower limbs, head, neck and trunk. Bones, joints, ligaments, muscles, nerves and vessels are included, and integration of structure and function is emphasized. Students are also introduced to the anatomy of the spinal cord and peripheral nerves.

PT 6221 Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 1 6 cr
Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for upper quadrant neuromusculoskeletal conditions across the lifespan.

PT 6224 Clinical Skills for Physical Therapy in Neuromusculoskeletal Conditions 2 6 cr
Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for lower quadrant neuromusculoskeletal conditions across the lifespan.

PT 6230 Applied Sciences for Physical Therapy 2 6 cr
Through lecture, tutorial and laboratory sessions, students will learn the application of anatomy, biomechanics, physiology, pathology and exercise to the neuromusculoskeletal system. Scientific and medical theoretical basis for physical therapy intervention will be covered.

PT 6250 Integrated Practice for Neuromusculoskeletal Conditions 3 cr
Students integrate relevant information for physical therapy management of neuromusculoskeletal conditions through problem-based learning. Case studies reflect current key indicator conditions from the Entry-to-Practice Physiotherapy Curriculum: Content Guidelines for Canadian University Programs.

PT 6260 Physical Therapy Practice and Professional Issues 1 3 cr
Through lecture and tutorial sessions, students will address various professional topics to develop their knowledge concerning of business, ethical and legal principles for physical therapy practice.

PT 6291 Neuromusculoskeletal Clinical Education 1 6 cr
First of two six-week experiental learning periods in the clinical community, providing opportunity for students to assess and treat clients with musculoskeletal disorders under supervision. Includes 3-4 hours of preparatory sessions prior to the placements, and 3-4 hours of follow up including debriefing group discussion and presentation of reflective journals.

PT 6292 Neuromusculoskeletal Clinical Education 2 6 cr
Second of two six-week experiential learning periods in the clinical community, providing opportunity for students to assess and treat clients with neuromusculoskeletal disorders under supervision. Prerequisite PT 6291.

PT 6310 Foundations to Evidenced-Based Practice 2 2 cr
Students will learn to identify appropriate research and /or evaluation questions and appropriate methodologies for the rehabilitation context and the general process of conducting a research/evaluation study to facilitate future participation in research. Course graded pass/fail.

PT 7121 Clinical Skills for Physical Therapy Neurological Conditions 5 cr
Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for neurological conditions across the lifespan.

PT 7124 Clinical Skills for Physical Therapy in Cardiorespiratory Conditions 5 cr
Through lecture, tutorial and laboratory sessions, students apply physical therapy assessment, diagnostic and treatment skills for cardiorespiratory conditions across the lifespan.

PT 7150 Integrated Practice for Cardiorespiratory and Neurological Conditions 3 cr
Students integrate relevant information for physical therapy management of complex cardiorespiratory and neurological conditions through lectures, labs and small group work with a focus on interprofessional collaborative practice. Case studies may include but are not limited to: geriatrics, developmental disorders, spinal cord injuries, ARDS, critical care, etc.

PT 7160 Physical Therapy Practice and Professional Issues 2 3 cr
Through lecture and tutorial sessions, students will integrate their knowledge and clinical experience concerning business, ethical and legal principles for physical therapy practice.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PT 6260.

PT 7230 Applied Sciences for Physical Therapy 3 3 cr
Through lecture, tutorial and laboratory sessions, students will learn the application of anatomy, physiology and pathology to the cardiovascular and pulmonary systems. This course provides the theoretical basis for physical therapy intervention for cardiovascular and pulmonary disorders.

PT 7292 Neurosciences Clinical Education 6 cr
A six-week experiential learning period in the clinical community, providing opportunity for students to assess and treat clients with neurological disorders under supervision. Includes 3 - 4 hours of preparatory sessions prior to the placements, and 3 - 4 hours of follow up including debriefing group discussion and presentation of reflective journals.

PT 7294 Cardiovascular and Pulmonary Clinical Education 5 cr
A five-week experiential learning period in the clinical community, providing opportunity for students to assess and treat clients with cardiovascular and pulmonary disorders under supervision. Includes 3-4 hours of preparatory sessions prior to the placement, and 3-4 hours of follow up including debriefing group discussion and presentation of reflective journals. Course is pass/fail.

PT 7330 Applied Sciences for Physical Therapy 4 3 cr
Through lecture, tutorial and laboratory sessions, students will learn the application of anatomy, physiology and pathology to the neurological system. Scientific and medical theoretical basis for physical therapy intervention will be covered.

PT 7390 Elective Clinical Education 6 cr
One six-week experiential learning period in the clinical community to complement previous clinical placements, address gaps in previous clinical placements and /or to explore emerging practice roles in physiotherapy.

PT 7410 Exercise Prescription and Manual Therapy for Physical Therapists 3 cr
Through a variety of learning strategies, students further develop exercise prescription and manual therapy skills in physical therapy assessment, diagnosis and treatment for individuals across the lifespan.

PT 7500 Physical Therapy Evaluation/Research Project 6 cr
Under the supervision of a faculty advisor the student will develop and complete a physical therapy or rehabilitation- focused research or evaluation project. Course graded pass/fail.

Physician Assistant Education (PAEP)

PAEP 7000 Physiology and Pathophysiology for Physician Assistants 3 cr
This brief introduction is designed to impart an understanding of normal physiological functioning of the human body. This basic science course builds upon the entry knowledge of the Physician Assistant student, by presenting the pathophysiology of disease by organ systems. The emphasis is on the homeostatic mechanisms for all the major organ systems. Evaluation will be by successful completion of exercises, class participation and written examination, demonstrating to faculty proficiency in course principles.

PAEP 7002 Physiology and Pathophysiology for Physician Assistants II 3 cr
A continuation of the material presented in Physiology and Pathophysiology for Physician Assistants. A basic science course which builds upon the entry knowledge of the PAEP learner by presenting normal physiology and the pathophysiology for disease by organ systems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Admission to PAEP Year 1

PAEP 7010 Human Anatomy for Physician Assistants 3 cr
This brief comprehensive introduction is designed to impart an understanding of gross functional anatomy of the human body. This basic science course builds upon the entry knowledge of the student by presenting clinical human anatomy, correlated to clinical applications, assessment and pathology of disease. Evaluation will be by successful completion of exercises, class participation and written examination, demonstrating to faculty proficiency in course principles.

PAEP 7030 Professional Studies of Physician Assistants 3 cr
This course is designed to provide the student with an understanding of the role the Physician Assistant plays within the structure of the Canadian Health Care System. This introduction is designed to impart an understanding of the interaction between the various stakeholders. Ethical considerations in health care and the legal aspects of the PA role in Canada will be addressed. Evaluation will be by successful completion of a presentation (evaluated by classmates), participation in ethical problem solving exercises and written examination, demonstrating to faculty proficiency in course principles. Students are expected to submit a research paper on an ethics topic of choice and write a short-answer examination at the end of the course.

PAEP 7042 Biochemistry for Physician Assistants 1 cr
A brief introduction to medical biochemistry.

PAEP 7045 Research and Clinical Practice for Physician Assistants 1 cr
An introduction to the skills required for quality improvement efforts and critical appraisal of medical literature in clinical practice and evidenced based medicine.

PAEP 7046 Genetics for Physician Assistants 1 cr
A brief introduction to medical genetics.

PAEP 7048 Pediatrics for Physician Assistants 3 cr
A brief, comprehensive didactic introduction to the field of obstetrics and gynecology designed to prepare the physician assistant to diagnose and treat, within his or her scope of practice, common obstetrics and gynecology conditions as would be encountered in a primary care setting.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Successful completion of MPAS year 1.

PAEP 7050 Obstetrics and Gynecology for Physician Assistants 3 cr
A brief, comprehensive didactic introduction to the field of obstetrics and gynecology designed to prepare the physician assistant to diagnose and treat, within his or her scope of practice, common obstetrics and gynecology conditions as would be encountered in a primary care setting.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: Successful completion of MPAS year 1.

PAEP 7052 Patient Assessment for Physician Assistants I 2 cr
A comprehensive introduction to the clinical assessment of a patient, delivered as a group of three courses. Part I introduces basic history-taking and physical exam skills. Patient Assessment II and Patient Assessment III extend these skills to other clinical settings.

PAEP 7054 Patient Assessment for Physician Assistants II 2 cr
Continues developing the skills in history taking and physical examination introduced in patient Assessment for Pas I. Learners are introduced to the Standardized Patient Program.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Admissions to PAEP Year 1.

PAEP 7056 Patient Assessment for Physician Assistants III 2 cr
A brief, comprehensive introduction to diagnostic imaging techniques and interpretation of diagnostic images designed to enable Physician Assistants, within their scope of practice, to diagnose and treat medical, surgical, and infectious disease.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Admission to PAEP Year 1.

PAEP 7068 Adult Medicine for Physician Assistants 1 6 cr
A comprehensive, system-based introduction to the clinical disciplines of medicine. Adult Medicine I is the first part of a two-course sequence; content areas include endocrinological, gastrointestinal and neurological, medicine, ophthalmology, and hematology/oncology.

PAEP 7078 Adult Medicine for Physician Assistants II 6 cr
A comprehensive, system-based introduction to the clinical disciplines of medicine. Adult Medicine II is the second part of a two-course sequence; content areas include cardiovascular, musculoskeletal, renal, dermatologic and respiratory medicine, and otolaryngology.

PAEP 7082 Diagnostic Imaging for Physician Assistants 1 cr
A brief, comprehensive introduction to diagnostic imaging techniques and interpretation of diagnostic images designed to enable Physician Assistants, within their scope of practice, to diagnose and treat medical, surgical and infectious disease.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Admissions to PAEP Year 1

PAEP 7084 Microbiology for Physician Assistants 1 cr
A brief introduction to Medical Microbiology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Admissions to PAEP Year 1.

PAEP 7090 Principles of Psychiatry for Physician Assistants 3 cr
A brief, comprehensive introduction designed to impart an understanding of mental and behavioral health. Based on the special needs of a patient populations, the patient's presentation and unique contributing factors, the PA will be able to evaluate and analyze the patient's needs, providing the required specialty assessment for the psychiatric patient. Evaluation will be by successful completion of a practical and written evaluation, demonstrating the faculty proficiency in the course material.

PAEP 7100 Principles of Surgery for Physician Assistants 3 cr
A brief, comprehensive introduction designed to impart an understanding of surgical diseases. Upon completion, the Physical Assistant student, with their scope of practice, will be able to diagnose, refer and treat the medical, surgical and infectious diseases from a surgical perspective. Evaluation will be by successful completion of a practical and written evaluation, demonstrating to faculty proficiency in the principals of surgery and application of surgical skills.

PAEP 7110 Emergency and Critical Care for Physician Assistants 3 cr
A brief, systems-based comprehensive introduction designed to impart an understanding of emergency and intensive care medicine. This course will equip the Physician Assistant student with the skills necessary to diagnose, refer and treat medical, surgical and infectious disease emergencies and life threatening conditions. The Advanced Cardiac Life Support (ACLS) course is a mandatory component of the Emergency and Critical Care course. It is organized by the Department of Emergency Medicine and is designed to provide the student with advanced knowledge and experience on how to handle a cardiac arrest. Most Physician Assistant students find the course invaluable regardless of what specialty they enter. Evaluation is based on successful completion of a practical evaluation, problem solving exercises, displaying proficiency in clinical skills and a written examination, demonstrating to faculty proficiency in course principles.

PAEP 7150 Year 1 Comprehensive Examination 0 cr
A pass/fail, multiple choice examination designed to assess students' knowledge of clinically relevant Year 1 material prior to entry into the clinical year.

PAEP 7202 Family Medicine for Physician Assistants 6 cr
A clinical rotation designed to impart a practical understanding of Family Medicine, to prepare the physician assistant, within his or her scope of practice, to diagnose and manage conditions and issues related to primary care medicine and general practice.

PAEP 7204 Clinical Elective for Physician Assistants I 1.5 cr
This course consists of two weeks of clinical time, offering an introduction to the clinical discipline of the Physician Assistant learner's choice. Course objectives will be developed by the learner in collaboration with PAEP faculty members.

PAEP 7206 Clinical Elective for Physician Assistants II 1.5 cr
This course consists of two weeks of clinical time, offering an introduction to the clinical discipline of the Physician Assistant learner's choice. Course objectives will be developed by the learner in collaboration with PAEP faculty members.

PAEP 7210 Clinical Internal Medicine for Physician Assistants 3 cr
A brief, clinical rotation designed to impart a practical understanding in the area of internal medicine. There will be an internal medicine speciality focus in this rotation versus the general exposure seen in Family Medicine. Upon completion, the Physician Assistant student will, within their scope of practice, be able to diagnose, refer and treat the medical, surgical and infectious conditions related to the field of internal medicine.

PAEP 7212 External Electives for Physician Assistant Students 0 cr
A clinical rotation of varying length designed to provide a physician assistant student not from the University of Manitoba with clinical education and training in a medical discipline of the student's choice at a University of Manitoba clinical teaching unit. Course credit is assigned by the student's home institution.

PAEP 7220 Clinical Surgery for Physician Assistants 3 cr
The 6-week General Surgery service rotation provides Physician Assistant-Student with clinical experience in a surgical learning environment. The PA-Student competencies addresses relate to the generalist role a PA requires to support surgery services and the skills required in surgical practice.

PAEP 7240 Clinical Pediatrics for Physician Assistants 3 cr
A brief, clinical rotation designed to impart a practical understanding of health and diseases in the field of pediatrics. Upon completion, the Physician Assistant student, within their scope of practice, will be able to diagnose, refer and treat the medical, surgical and infectious conditions related to the field of pediatric medicine.

PAEP 7250 Clinical Psychiatry for Physician Assistants 3 cr
A brief, clinical rotation designed to impart a practical understanding of mental health and psychiatric disease to the Physician Assistant. Upon completion, the Physician Assistant student, within their scope of practice, will be able to diagnose, refer and treat the medical, surgical and infectious conditions related to psychiatric medicine.

PAEP 7260 Community Health for Physician Assistants 3 cr
Community Health for PAs is a 4-week clinical experience focusing on primary health care and community services. Community health focuses on the maintenance, protection, and improvement of the patient's and communities' health status. The learners' experience occurs in community health organizations that provide primary healthcare, health promotion, and community services using interdisciplinary teams of health providers. Course graded pass/fail.

PAEP 7270 Clinical Emergency Medicine for Physician Assistants 3 cr
The Physician Assistant must have the knowledge and skills to manage life-threatening emergent medical or surgical issues. The competencies acquired during the Emergency Medicine clinical rotation build upon material taught during the academic year of the program. PAEP 7270 is a six-week rotation at designated Emergency Departments in Manitoba.

PAEP 7280 Clinical Obstetrics and Gynecology for Physician Assistants 3 cr
A brief, clinical rotation in obstetrics and gynecology designed to impart a practical understanding of reproductive health. Upon completion, the Physician Assistant student, within their scope of practice, will be able to diagnose, refer and treat the medical, surgical and infectious conditions related to the field of reproductive, obstetrical and gynecologic health.

PAEP 7300 Comprehensive Assessment of Clinical Skills 0 cr
The Comprehensive Assessment of Clinical Skills is a comprehensive summary of clinical performance using information from PA-ITRES, mini-CEX evaluations, and observed histories/physical exams. This assessment will be graded on a pass/fail basis.

PAEP 7350 PAEP Final Project 0 cr
A capstone project that may take a variety of formats as dictated by Program faculty. Students will, in consultation with a faculty mentor, develop and research a topic for presentation to faculty and peers.

Physics (PHYS)

PHYS 7010 General Relativity 1: A Relativistic Theory of Gravity 3 cr
Topics include Newtonian gravity, the theory of special relativity, relativistic hydrodynamics, relativistic electrodynamics, curved space-time, tensor calculus, and Einstein's equations. This course is taught together with PHYS 4010. Students may not hold credit for both PHYS 4010 and PHYS 4020.
Equiv To: PHYS 4010, PHYS 4020

PHYS 7250 Seminar course in Advanced Physics 6 cr
Selected topics in advanced physics may be offered from time to time by the faculty or visiting lecturers. Credit for this course will be determined by the head of the department of Physics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PHYS 7260 Mass Spectroscopy 3 cr
Two lectures per week for one term. The course covers the techniques and applications of mass spectroscopy. Special emphasis is given to the general principles of ion optics for use in the design of modern instruments.

PHYS 7360 Medical Radiation Physics 3 cr
The relevant physics of the production and interaction of radiation beams used in both diagnostic and therapeutic medicine will be covered. Such beams included X- and g-rays, particle beams, visible and I.R. radiation, microwaves, and ultrasound.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 4560 or consent of instructor.

PHYS 7370 Radiation Therapy Physics 3 cr
The calculations and measurements necessary to determine the radiation dose distribution in patients receiving radiotherapy will be presented. Newer treatment modalities, e.g., pion therapy and hyperthermia will be discussed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PHYS 4510, PHYS 4560, or consent of instructor.

PHYS 7380 Radiation Biology 3 cr
The interaction of ionizing and non-ionizing radiations with living systems. The relevance to Radiotherapy. Nuclear medicine and diagnostic radiology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 1020 or consent of instructor.

PHYS 7390 Radiation Protection 3 cr
Ionizing radiation including X-ray, g-ray, neutrons, alpha-, beta-, and heavy ion-particle sources, bioeffects, and protection principles are covered. Non-ionizing radiation, including laser light, radio- frequency waves, ultraviolet and infrared light, and ultrasound, sources, bioeffects, and exposure protection guidelines are studied.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PHYS 7360 and PHYS 7380 or consent of instructor.

PHYS 7400 Linear Systems for Imaging 3 cr
Fundamental principles of image formation, analysis of the characteristics of medical images, parametric description of image quality; application to transmission radiography.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PHYS 7410 Diagnostic Methods 3 cr
This course is an intensive introduction to the fundamentals of medical imaging using magnetic resonance imaging and ultrasound. Included is an in-depth look at the physics and mathematics of image formation. Note this course is challenging with a great deal of mathematical content.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PHYS 7400/4400 or consent of instructor.

PHYS 7422 Physics of X-ray Imaging 3 cr
X-ray imaging is the oldest form of medical imaging, yet continues to undergo dramatic technological development and innovation. This course will cover topics related to clinical and diagnostic x-ray imaging, including: x-ray production; x-ray detection; special radiographic systems; mammography; fluroscopy; digital imaging; computed tomography and theoretical and practical aspects of image reconstruction and image quality.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PHYS 7400/PHYS 4400 or consent of instructor.

PHYS 7430 Physics of Nuclear Medicine 3 cr
Nuclear medicine covers a range of topics from radionuclide based imaging methods to treatments through administration of radioisotopes. Knowledge of nuclear structure, radioactive decay and the interaction of radiation with matter are essential to understanding the application of radiotracer methods to medicine and the function of highly sophisticated nuclear medicine imaging equipment. This course will cover topics related to clinical and diagnostic nuclear medicine including: radioactive decay; interaction of radiation with matter; radionuclide and radiotracer production counting statistics; radiation detection systems; nuclear medicine imaging systems; emission computed tomography; image reconstruction and evaluation and radiation dosimetry.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7400/4400 or consent of instructor.

PHYS 7440 Advanced Topics in Physics 3 cr
Selected topics in advanced physics. This course may be offered from time to time by the faculty or visiting lecturers.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: consent of instructor.

PHYS 7460 Methods in Medical and Health Physics 1 - (Medical Imaging and Radiation Protection) 3 cr
This practical course is designed to give students hands-on experience with equipment, clinical techniques and methods of analysis in medical imaging and health physics. Topics such as: dosimetry of unsealed sources, radiation shielding design and surveys, meter calibration, decontamination and plume dispersal, CT, Ultrasound, X-ray and Nuclear Medicine imaging techniques, mammography and quality assurance in medical and health physics will be covered. Students are required to take both PHYS 7460 and PHYS 7470 which will be offered in consecutive years. Note: only students accepted to the Medical Physics Program will be allowed to register for this course

PHYS 7470 Methods in Medical and Health Physics 2 - (Radiotherapy and Radiation Biology) 3 cr
This practical course is designed to give students hands-on experience with equipment, clinical techniques and methods of analysis in radiotherapy and radiation biology. Topics such as: error analysis and data reduction, dosimetry of ionizing radiation, radiotherapy treatment planning, calibration, HDR brachytherapy, micro-dosimetry and quality assurance in medical physics, will be covered. Students are required to take both PHYS 7460 and PHYS 7470 which will be offered in consecutive years. Note: only students accepted to the Medical Physics Program will be allowed to register for this course.

PHYS 7500 Condensed Matter Physics 1 3 cr
The principles of electrical and vibrational properties of primarily crystalline structures. Topics include free electron theory, electron-electron interactions, screening, phonons, electron-phonon coupling and transport properties.

PHYS 7510 Condensed Matter Physics 2 3 cr
A comprehensive survey of advanced topics in condensed matter physics. The topics may change from year to year but include collective excitations, defects, localized states, superconductivity, Josephson effect, superfluids, quantum Hall effect.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7500 or consent of instructor.

PHYS 7530 Physics of Magnetism 3 cr
A comprehensive survey of magnetism and magnetic materials. Topics include the origins of magnetic interactions, types of magnetic order, domain structures, magnetization processes, dynamics, thin films, applications.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7500 or consent of instructor.

PHYS 7540 Statistical Mechanics 3 cr
The principles of statistical mechanics. Topics include statistical ensembles, entropy, Fermi gas, Bose-Einstein condensation, superfluidity, phase transitions and equilibria, fluctuations, Fluctuation-Dissipation and Wiener-Khintchin theorems, liquids and dense gases.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 4390 or consent of instructor.

PHYS 7550 Advanced Statistical Mechanics 3 cr
An advanced treatment of phase transitions and critical phenomena in a variety of systems. Topics include solvable models, mean field theory, Landau theory, scaling laws, series methods, renormalization group methods, linear response theory, generalized rigidity.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7540 or consent of instructor.

PHYS 7560 Relativistic Quantum Mechanics 3 cr
Relativistic single particle equations for bosons and fermions, quantization of fields, interacting fields, elementary quantum electrodynamics, covariant perturbation theory and Feyman diagrams.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7420 or consent of instructor.

PHYS 7570 Nuclear Physics 3 cr
Hadron and lepton scattering, the nucleon-nucleon interaction, nuclear structure, nuclear shell model, nuclear excitations and decay, hadronic interactions and decays, the quark model.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 4510 or consent of instructor.

PHYS 7580 Advanced Topics in Nuclear Physics 3 cr
A selection of advanced topics in nuclear and intermediate energy physics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7570 or consent of instructor.

PHYS 7590 Electromagnetic Theory 3 cr
Maxwell's equations, electromagnetic potentials, gauge conditions, conservation laws, Green function methods, diffraction theory, simple radiating systems, Lagrangian derivation of Maxwell's equations and the covariant structure of electromagnetism.

PHYS 7600 Applied Electromagnetism 3 cr
Wave guides and resonant cavities, charged particles collision theory, Bremsstrahlung, radiation of moving charged particles, multipole radiation.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7590 or consent of instructor.

PHYS 7630 Particle Physics 3 cr
Basic particles and interactions, symmetries and conservation laws, the quark model, deep inelastic scattering, electroweak theory, introduction to QCD.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7420 or consent of instructor.

PHYS 7660 Astronomy 1: The Phenomenology of Galaxies 3 cr
Describes astronomical standards such as intensity magnitudes, colour and metalicity; the properties of stars and the interstellar medium; galactic structure, kinematics, and the evolution of galactic components.

PHYS 7670 Astronomy 2: Galactic Dynamics 3 cr
A continuation of PHYS 7660, this course provides mathematical descriptions of potential theory, disk dynamics and spiral structure, collisions between galaxies, and dark matter. Additional topics are galaxy evolution, large-scale structure of the universe and cosmology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7660.

PHYS 7680 Astrophysics 1: Stars 3 cr
Covers the basic physical concepts required to extract qualitative estimates of astrophysical parameters, describes several aspects of observational astronomy, and it emphasizes in a more mathematical way the astrophysics of stellar structure and evolution.

PHYS 7690 Astrophysics 2: Interstellar Matter and Galaxies 3 cr
Emphasizes the physics of interstellar matter and dust grains, gaseous nebulae, basic hydrodynamics, shock waves, and supernova remnants.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 7680.

PHYS 7700 Research Project in Medical Health Physics 0 cr
Students undertake a relevant research project in an approved laboratory. At least six months of full-time research is expected. The research project report shall be submitted in a style and length as specified by the department. A comprehensive oral examination will follow the submission of the project report.

PHYS 7710 Quantum Optics 6 cr
Matter-radiation interaction, spectral line broadening, quantization of the radiation field, degree of coherence of light; number, coherent, chaotic and squeezed states of light, quantum theory of detection, laser theory, resonance fluorescence, light scattering, non-linear quantum optics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PHYS 7720 Quantum Mechanics 1 3 cr
Topics include the concepts and foundations of quantum mechanics, continuous and discrete symmetries, time dependent perturbation theory including interaction with electromagnetic fields and scattering theory. Not to be held with the former PHYS 7420.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHYS 4380 (C+).

Physiology (PHGY)

PHGY 7010 Readings in Physiology 6 cr
Tutorial course covering recent contributions in an area of physiology related to a student's research interests.

PHGY 7030 Special Physiology 6 cr
Seminar and reading course on physiology of particular systems.

PHGY 7150 Cardiac Physiology 3 cr
Tutorial and reading course on cardiac physiology; emphasis on the energetics of cardiac contraction and its relationship to ultrastructural and biochemical properties of the heart.

PHGY 7160 Vascular Physiology 3 cr
Lectures and seminars on physiology of blood vessels including hemodynamics, rheology of blood, and the function and structure of smooth muscle.

PHGY 7170 Endocrine and Metabolic Physiology 3 cr
Special topics in endocrine and metabolic physiology emphasizing current concepts.

PHGY 7172 Advanced Endocrine and Metabolic Physiology 1.5 cr
A seminar course on advanced topics in endocrine and metabolic physiology and diseases. The course focuses on developing skills required to present and critique research data on endocrine and metabolic physiology & pathophysiology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHGY 7256 or consent of course coordinator.

PHGY 7180 Advanced Topics in Physiology 3 cr
Advances in selected areas of physiology, research proposals related to the student's area of interest, procedures for grant writing and refereeing grant proposals, evaluation of citations and impact factors.

PHGY 7190 Research Topics in Physiology 3 cr
Seminars on research presentations by staff and senior students in physiology.

PHGY 7230 Molecular and Cellular Aspects of Organ Physiology 3 cr
Tutorial course: Function of various organs in the light of current concepts regarding structure and function at the molecular and cellular level.

PHGY 7252 Respiratory Physiology & Pathophysiology 1.5 cr
Lecture, readings, and student-directed discussion course dealing with fundamental biophysical processes and function of major respiratory organ systems (including membrane transport and muscle contraction in respiratory physiology), illustrated with pathophysiological structures and function, and their relationship to disease. The course will also examine current therapeutic approaches and active areas of research interest.

PHGY 7254 Cardiovascular Physiology & Pathophysiology 1.5 cr
Lecture, readings, and student-directed discussion course dealing with fundamental biophysical processes and function of major cardiovascular organ systems, illustrated with pathophysiological structures and function, and their relationship to disease. The course will also examine current therapeutic approaches and active areas of research interest.

PHGY 7256 Endocrine Physiology & Pathophysiology 1.5 cr
Lecture, readings, and student-directed discussion course dealing with fundamental biophysical processes and function of major endocrine (including reproductive) organ systems, illustrated with pathophysiological structures and function, and their relationship to disease. The course will also examine current therapeutic approaches and active areas of research interest.

PHGY 7258 Neurophysiology & Pathophysiology 1.5 cr
Lecture, readings, and student0directed discussion course dealing with fundamental biophysical processes and function of major neurophysiology organ systems, illustrated with pathophysiological structures and function, and their relationship to disease. The course will also examine current therapeutic approaches and active areas of research interest.

PHGY 7260 Advanced Neurological Sciences 3 cr
Seminar, readings and lecture course covering original research papers leading to the most significant advances in the neurological sciences. Emphasis is placed on student comprehension of major research directions in the broad field of neurological sciences.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHGY 7240 or equivalent and consent of instructor.

PHGY 7262 Gastrointestinal and Renal Physiology & Pathophysiology 1.5 cr
This course will provide graduate students with basic understanding of physiology and pathophysiology of the gastrointestinal and renal systems

PHGY 7270 Physiology of Striated Muscle 3 cr
A lecture and seminar course dealing with the physiology and biophysics of skeletal and cardiac muscle.

PHGY 7282 Neonatal and Fetal Physilogy 3 cr
Lecture course examining developmental changes in lung/heart/brain, in the context of fetal environment, normal neonatal Physiology, Physiology of prenatal hypoxia in related neonatal disease. Prerequisites PGHY 7252, or consent of instructor.

PHGY 7290 Physiology of the Airways 3 cr
A lecture and seminar course dealing with the physiology of the airways in the intact animal and with the role of smooth muscle in controlling airway function. The fundamental properties of airway smooth muscle in controlling airway function will be emphasized.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHGY 7240 or equivalent and consent of instructor.

PHGY 7300 Molecular Endocrinology 3 cr
A lecture and seminar course on advances in molecular and cellular aspects of endocrinology and other systems. The course is taught by members of the Gene Technology Group and topics will reflect current research interests. These include the roles of hormones/growth factors in cancer, growth and development, and reproduction, and the regulation of hormone gene families. This course is designed for individuals with knowledge in the areas of molecular and/or cell biology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PHGY 7310 Principles of Electronics for Life Sciences 3 cr
Lectures on basic principles of electricity and electronics of particular application to electrophysiology.

PHGY 7320 Instrumentation for Electrophysiology 3 cr
Lectures on the application of principles of electricity and electronics to electrophysiology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHGY 7310.

PHGY 7330 Physiology of Smooth Muscle 3 cr
A lecture and seminar course dealing with the biophysics, electrophysiology, pharmacology and biochemistry of the smooth muscle in the major organ systems.

PHGY 7340 Cardiovascular Electrophysiology 3 cr
A comprehensive lecture and seminar course on the electrical activity of the cardiovascular system. The fundamental electrical properties of cardiac and vascular muscle cell membranes, currents and channels as studied by intracellular microelectrodes, voltage clamp and patch clamp techniques will be stressed.

PHGY 7350 Cardiovascular Pathophysiology 3 cr
A comprehensive lecture course on disease in the cardiovascular system. Topics to be covered include methods of analysis of cardiac viability, heart failure, arrhythmias, heart diseases (congenital, valvular, pericardial, cardiomyopathy), hypertension, stroke, atherosclerosis and myocardial infarction.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHGY 7240.

PHGY 7360 Trends in Cardiovascular Sciences 3 cr
This is a comprehensive seminar-based course dealing with recent advances in cardiovascular research given by local fellows and prominent scientists. Students are expected to participate in the series and present their own research data seminar. This course will enable the trainees to learn how to prepare research seminars, handle question/answer sessions after a seminar and prepare a formal report.

PHGY 7370 Cardiovascular Molecular Biology 3 cr
This course introduces the principles of molecular biology and their application to the cardiovascular system in health and disease, with a focus on gene regulation, cardiac development and the use of transgenic models. The course comprises lectures and student self-directed learning assignments.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PHGY 7254 or permission of instructor.

PHGY 7380 Cardiovascular Cell Biology 3 cr
A comprehensive lecture course on morphology, biochemical composition and function of the cardiac and smooth muscle cell, with particular emphasis on developmental and injury-related issues. Topics include the description of various cardiac cells and their immediate extracellular environment, intercellular communication, cardiac development, control of cell cycle, hyperplasia and hypertrophy, cardiac growth factors, mechanism of injury and cell death, regeneration, heat shock proteins and cardioprotection.

PHGY 7390 Gene Therapy 3 cr
Advanced course detailing new frontiers in the application of gene therapy and technological protocols currently utilized in treating cardiovascular diseases such as cardiomyopathy, hypertension, congenital birth defects and restenosis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PHGY 7370, PHGY 7380 or permission of the course coordinator.

PHGY 7400 Cellular and Molecular Biology of the Vascular System 3 cr
This course provides current concepts in vascular biology at the molecular level as well as the pathogenesis and treatment of vascular diseases for the purpose of graduate studies. Students may also learn up-to-date techniques in research of vascular cell biology and the diagnosis of vascular diseases through laboratory demonstrations.

Plant Science (PLNT)

PLNT 7120 Special Problems in Plant Science 3 cr
Reading or assignment or research on specific aspects of crop development, crop production, weed science, plant pathology, plant biochemistry or plant physiology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of department head.

PLNT 7130 Topics in Plant Breeding and Genetics 3 cr
An in-depth study of selected topics of current interest in the fields of plant breeding and genetics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of department head.

PLNT 7162 Plant Genomics 3 cr
Detailed analysis of advanced genomic techniques, experimental approaches, and progress in current plant genomic projects.

PLNT 7164 Genetic Mapping in Plants 3 cr
Application of genetic mapping analyses for the dissection of traits in plant species. Linkage mapping, quantitative trait locus (QTL) mapping, association mapping, and related analyses will be reviewed in detail. Emphasis will be placed on practical applications in genetic studies. The analysis and interpretation of real data will be conducted in computer tutorial sessions.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PLNT 4330 or consent of instructor.

PLNT 7170 Advanced Plant Breeding 3 cr
Advanced training in modern methods of plant breeding.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PLNT 3520 or consent of instructor.

PLNT 7250 Plant Science Seminar 3 cr
Principles of oral and poster presentations, visual aid design and organization are discussed and then applied by students in presentations of their current research, and agricultural issues. Course evaluated on a pass/fail basis.

PLNT 7340 Advanced Weed Science 3 cr
Weed biology and ecology in the context of weed management, covering theory, current information, investigative approaches and experimental techniques. Topics explored include: weed population biology, modelling, weed community ecology, herbicide efficacy and herbicide resistant weeds.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PLNT 3540 or equivalent or consent of instructor.

PLNT 7420 Advanced Plant Science Seminar 3 cr
The development of a research proposal, instruction and practice in scientific writing and presentation of a seminar. For Ph.D. students only. Course evaluated on a pass/fail basis.

PLNT 7480 Epidemiology of Plant Disease 3 cr
Lectures, seminars and discussions relating epidemiological principles to plant disease development and control. The course examines in-depth the interrelationships of host, pathogen and environment. Measurement of epidemiological parameters is stressed in relation to disease assessment, disease forecasting and disease management.

PLNT 7610 Topics in Crop Physiology 3 cr
An in-depth study of selected topics of current interest in the field of Crop Physiology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of department head.

PLNT 7612 Advanced Plant Physiology 3 cr
Examination of current concepts of regulation and limitations of photosynthesis, nitrogen metabolism, and assimilate partitioning in field and horticultural crops. Content will include the mode of action of plant growth regulators and herbicides in these processes.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PLNT 3400 or BIOL 3400 or the former PLNT 3500, PLNT 4590 or consent of instructor.

PLNT 7620 Topics in Agronomy 3 cr
An in-depth study of selected topics of current interest in the field of Agronomy.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of department head.

PLNT 7630 Topics in Plant Pathology 3 cr
An in-depth study of selected topics of current interest in the field of Plant Pathology.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of department head.

PLNT 7660 Advanced Crop Production 3 cr
A lecture-seminar course to investigate environmental, crop management and genetic limitations to growth, yield formation, yield, water use efficiency and quality of field, forage and horticultural crops. Interactions will be stressed and emphasis will be placed on sustainable crop production systems. Simple and complex relationships will be demonstrated using models.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PLNT 7670 Quantitative Genetics and Plant Breeding 3 cr
The theoretical basis of quantitative genetic variation. The genetic structure of plant breeding populations. Estimation, interpretation and use of genetic parameters in cross-pollinated and self-pollinated plant species. Variance components, genotype x environment interaction, inbreeding, heterosis, selection, heritability and combining ability.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PLNT 3520 and PLNT 4330 or consent of instructor.

PLNT 7690 Bioinformatics 3 cr
An introduction to the theory, strategies, and practice of data management, analysis and utilization in molecular biology. Topics include DNA and protein sequence analysis, biological databases, genomic mapping and analysis of gene expression data. This course will include problem-solving exercises using Unix server-based software. Not to be held with PLNT 4610.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PLNT 2530 or PLNT 3140 or PLNT 4310 or the former PLNT 4540 or MBIO 3410 or consent of instructor.
Equiv To: PLNT 4610

Political Studies (POLS)

POLS 6010 The Manitoba Legislative Internship Seminar 6 cr
This credit is granted to six individuals who annually complete the assignment as Legislative Interns within the Manitoba Legislative Assembly.

POLS 7100 The Study of Politics 3 cr
This course introduces students to the academic discipline of Political Science via an exploration of its origins, evolutions, and challenges. Particular emphasis is placed on contemporary issues and debates. Course graded pass/fail.

POLS 7110 Major Research Paper 0 cr
The Major Research Paper (or MRP) is designed for M.A. students in Political Studies who are doing the course-based stream. Students in this course will pursue individual research projects in an area of interest to them, once they have completed the majority of other program coursework. This course is evaluated on a pass/fail basis.

POLS 7130 Theories and Issues in Public Administration 3 cr
Integrating theory and practice helps to better understand the challenges facing public administration. Topics covered include changing approaches to management, human resource and financial management, reporting, accountability, citizen engagement, and network governance. Restricted to MPA students.

POLS 7132 Public Policy Process and Issues 3 cr
An introduction to the idea of policy analysis, including key foundational concepts and significant theories, models, and approaches; how and why the policy process operates as it does (empirical) and how and why some think it should (normative); and specific policy issues. Restricted to MPA students.

POLS 7134 Qualitative Methods and Communications for the Public Sector 3 cr
Communication coupled with an understanding of qualitative research approaches are key to success in public administration. Topics include research design, policy research, referencing, evaluating writing and research, and presenting for results. Restricted to MPA students.

POLS 7136 Governance and Administration 3 cr
An introduction to theories of organization and bureaucracy linked to administrative practices in the public sector. Governance models (Traditional Public Administration, New Public Management, Multi-level Governance) in the Canadian, provincial, and local context will be explored. Restricted to MPA students.

POLS 7138 Quantitative Methods for Policy Analysis 3 cr
An introduction to quantitative methods, including research design, data collection techniques, basic statistical analysis, statistical significance, contingency tables, multiple regression; with an emphasis on reading tables and graphs and understanding statistical assumptions. Restricted to MPA students.

POLS 7140 Principles of Public Finance for Policy Analysis 3 cr
An introduction to basic economic theories and tools used in public sector economics, which may include the economics/politics of taxing policies, externalities, theories of intergovernmental grants, major Canadian government spending programs, and new developments. Restricted to MPA students.

POLS 7142 Selected Topics in Public Administration 3 cr
A course on a selected topic in the discipline of Public Administration. The content of this course will vary. Please contact department for a course description. Students can earn multiple credits for this course only when the topic subtitle is different.

POLS 7230 Comparative Politics of Advanced Industrial States 3 cr
An introduction to the field of comparative politics through an examination of the key political issues facing advanced industrial states and how different political systems fare in dealing with them. Students may not hold credit for both POLS 7230 and the former POLS 7720.
Mutually Exclusive: POLS 7720

POLS 7270 Selected Topics in Politics 3 cr
A course on a selected topic in the discipline of Political Science. The content of this course will vary. Please contact department for a course description. Students can earn multiple credits for this course only when the topic subtitle is different.

POLS 7280 Directed Readings in Politics 3 cr
An independent reading and/or research course on a selected topic in political studies, undertaken and arranged in consultation with the prospective instructor, upon the approval of the Graduate Committee. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

POLS 7290 Directed Readings in Politics 2 6 cr
An independent reading and/or research course on a selected topic undertaken and arranged in consultation with the prospective instructor, upon approval of the Graduate Committee. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

POLS 7300 Directed Readings in Public Administration 3 cr
An independent reading and/or research course on a selected topic undertaken and arranged in consultation with the prospective instructor, upon approval of the Graduate Committee. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

POLS 7330 State-Civil Society Relations 3 cr
An examination of how the state relates to civil society actors, notably the voluntary sector in Canada. Students will critically assess the role voluntary organizations play - and should play - in governing process.

POLS 7340 Canadian Government 3 cr
Examines the core institutions of Canadian Government and politics including parliamentary government, federalism, the Constitution and the Charter of Rights and Freedoms.

POLS 7350 Canadian Democracy 3 cr
Examines the core institutions and processes of Canadian democracy including political parties, elections, voting, social movements, interest groups and public opinion.

POLS 7370 Seminar in the Theory and Practice of Public Administration 6 cr
The intent of this course is to provide insight into the exigencies of actual public administration. The course will be conducted on a topical basis within the framework of certain trends facing Canadian governments today. (The course will attempt to utilize, to the fullest extent possible, the particular expertise of students in the program, faculty members, and of both elected and appointed public officials.)

POLS 7410 Selected Topics in Political Behaviour 1 3 cr
A systematic examination of empirical research in the area of political socialization and political culture.

POLS 7470 Strategic Human Resource Management in Government 3 cr
A study of the human resource management functions, including planning, staffing, training, performance management, compensation and labour relations, in ways that optimize organizational performance. This course will also address contemporary challenges including recruitment and retention, managing change, demographic shifts, and information technology.

POLS 7520 The Political Classics 3 cr
A thorough study of selected works with special attention to methodology, historical content, theoretical position and universal significance.

POLS 7530 International Political Economy 3 cr
An examination of the systematic study of international political economy. Particular attention is paid to the foreign economic policies of advanced industrialized states and the various issues surrounding the redistribution of wealth and influence in the contemporary international system.

POLS 7550 Contemporary Issues in Canadian Politics 3 cr
A seminar series examining a contemporary debate in Canadian politics and government. The specific topic will vary from year to year depending on faculty interest and specialization.

POLS 7610 Political Theory and Contemporary Issues 3 cr
An examination of recent theoretical perspectives on contemporary political institutions, problems and values.

POLS 7710 Liberalism and Its Critics 3 cr
An advanced study of liberalism and various theoretical challenges to its ethical and political claims.

POLS 7790 International Relations Theory 3 cr
A critical assessment of basic theories and models used in International Relations, emphasizing theoretical approaches and research.

POLS 7800 MPA Co-operative Education Term 1 0 cr
This work term enables MPA students to gain experience in public or non-profit sector employment. Work terms are normally paid positions offered by employers in the public or non-profit sectors for a minimum of 13 weeks. Learning objectives are established by the employer, in conjunction with the student and Co-op Course Director. Students with significant public or non-profit sector work experience may apply to have this course requirement waived. Course graded pass/fail.

POLS 7810 MPA Co-operative Education Term 2 0 cr
This work term enables MPA students to gain experience in public or non-profit sector employment. Work terms are normally paid positions offered by employers in the public or non-profit sectors for a minimum of 13 weeks. Learning objectives are established by the employer, in conjunction with the student and Co-op Course Director. Students with significant public or non-profit sector work experience may apply to have this course requirement waived. Course graded pass/fail.

POLS 7850 Contemporary Strategic and Security Studies 6 cr
An advanced course in strategic studies. The evolution of strategic thought in the modern period will be examined, and particular emphasis will be placed on the role of armed force in relation to the problem of international security. Normally students will be expected to have taken POLS 4730 or its equivalent as prerequisite.

POLS 7910 Multivariate Research Methods 3 cr
Introduction to the theory and application of multivariate regression models in political analysis.

POLS 7980 Professional Development 3 cr
Students will build employment-related skills such as interpersonal communications, presentation, leadership, career development, and software-related skills. They will bridge theory and practice through participation and reflection in community events and workshops. Restricted to MPA students. Course graded Pass/Fail.

POLS 7990 MPA Capstone Seminar 3 cr
Students pursue individual supervised projects that allow them to integrate theory and practice in an original topic in public administration and/or public policy, drawing on their skills and knowledge gained through the program. These projects will be presented in a semester-end colloquium. Restricted to MPA students.

POLS 9010 UW POL 4301 Administrative Theory 6 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9020 UW POL 4400 Seminar in Canadian Politics 6 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9030 UW POL 4415 State and Economy 6 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9040 UW GPOL 7700 Theories and Issues in Public Administration 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9090 UW GPOL-7331 Directed Readings in Public Administration 6 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9242 UW POL-4505 Politics of Urban Planning 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9250 UW GPOL 7710 Public Policy Process and Issues 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9260 UW GPOL 7720 Governance and Administration 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9340 UW GPOL-7300 Seminar in Theory and Practice of Public Administration I 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9350 UW GPOL-7305 Seminar in Theory and Practice of Public Administration II 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9370 UW GPOL-7320 Seminar in the Public Policy Process 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9380 UW GPOL-7325 Seminar in Public Policy Issues 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9420 UW GPOL 7730 Principles of Public Finance for Policy Analysis 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9470 UW GPOL-7335 Directed Readings in Public Administration 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9540 UW POL 4515 Inner City Seminar 6 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9560 UW POL 4105 Seminar in Global Political Economy 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9570 UW POL 4100 Seminar in Global Politics 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9606 UW GPOL-7385 Special Topics in Public Administration 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9608 UW POL 4121 Special Topics in Global Politics 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9610 UW GPOL 7760 MPA Capstone Seminar 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9612 UW GPOL-7505 The Politics of Urban Development 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9620 UW GPOL 7770 Professional Development 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9630 UW GPOL 7740 Quantitative Methods for Policy Analysis 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

POLS 9640 UW GPOL 7750 Qualitative Methods and Communication for the Public Sector 3 cr
Course may be taken as part of a Master of Public Administration program offered jointly with the University of Winnipeg.

Preventive Dental Science (PDSD)

PDSD 7000 Neural Basis of Oropharyngeal Function 3 cr
A program of problem-oriented seminars on the sensory and reflex mechanisms affecting the respiratory and alimentary functions of the mouth and pharynx, mandibular posture and movement and respective application to oropharyngeal dysfunction and orthodontic therapy. One seminar per week for one term.

PDSD 7020 The Mechanics of Orthodontic Therapy 6 cr
The mathematics of three dimensional space, force and moment systems are given as the basis for considering the mechanics of orthodontic treatment. The mechanical properties of some orthodontic materials are studied as a background for appliance design. The quantitative aspects of tooth movement are discussed in terms of patient treatment planning. Seminar and laboratory sessions.

PDSD 7040 Clinical Craniofacial Growth and Development 3 cr
A program of student-based seminars on the morphogenesis of craniofacial structures and their significance to clinical problems.

PDSD 7060 Cephalometric Analysis 3 cr
A seminar program on the application of cephalometric radiography to craniofacial morphological research, orthodontic diagnosis and case analysis.

PDSD 7070 Biology of Orthodontics and Facial Orthopedics 3 cr
A program of student-based seminars and lectures on the biological basis of orthodontic and facial orthopedic diagnosis and therapeutic technique.

PDSD 7101 Preventive Programs in Pediatric Dentistry 3 cr
This course will be offered during the second year (term III). The prerequisite for this course will be the completion of the required courses in the first year of the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients II. Course is evaluated on a pass/fail basis.

PDSD 7102 Hospital Pediatric Dentistry I 6 cr
This course will be offered during the first year (term I and II). The prerequisite for this course will be the dental degree obtained prior to applying to the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pedicatric Patients I and Special Needs and Emergency care in Pediatric Patients. Course is evaluated on a pass/fail basis.

PDSD 7103 Hospital Pediatric Dentistry II 6 cr
This course will be offered during the first year (term III and IV). The prerequisite for this course will be completion of the required courses in the first year of the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients II and Preventive Programs in Pediatric Dentistry. Course is evaluated on a pass/fail basis.

PDSD 7104 Management and Restorative Treatment of Pediatric Patients I 6 cr
This course will be offered during the first year (term I and II). The prerequisite for this course will be the dental degree obtained prior to applying to the program. In clinical terms this course will be taught with the following courses: Hospital Pediatric Dentistry I and Preventive and Community Pediatric Dentistry. Course is evaluated on a pass/fail basis.

PDSD 7105 Management and Restorative Treatment of Pediatric Patients II 6 cr
This course will be offered during the second year (term III and IV). The prerequisite for this course will be the completion of the required courses in the first year of the program. In clinical terms this course will be taught with the following courses: Hospital Pediatric Dentistry II and Preventive Programs in Pediatric Dentistry. Course is evaluated on a pass/fail basis.

PDSD 7106 Preventive and Community Pediatric Dentistry 3 cr
This course will be offered during the first year (term I). The prerequisite for this course will be the dental degree obtained prior to applying to the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients I. Course is evaluated on a pass/fail basis.

PDSD 7107 Special Needs and Emergency Care in Pediatric Patients 3 cr
This course will be offered during the first year (term I). The prerequisite for this course will be the dental degree obtained prior to applying to the program. In clinical terms this course will be taught with the following courses: Management and Restorative Treatment of Pediatric Patients I and Hospital Pediatric Dentistry I. Course is evaluated on a pass/fail basis.

PDSD 7108 Growth and Development - Management of the Developing Occlusion 3 cr
A program of resident presentations and seminars on the biology of interceptive orthodontics and dentofacial orthopaedics and their significance to clinical pediatric dentistry.

PDSD 7110 Pharmacology and Toxicology in Pediatric Dentistry 3 cr
Residents will be expected to obtain knowledge of pharmacology and toxicology of commonly used medications in clinical pediatric dentistry. A number of seminars will be conducted to obtain adequate knowledge and skills in this course.

Psychology (PSYC)

PSYC 7012 Ethics, History and Profession of School Psychology 1 3 cr
An overview of the fundamental concepts and issues of professional School Psychology. Ethical, professional, regulatory and legal issues pertaining to the practice of school psychology are examined. Also examined are the history of school psychology and the organization of educational systems. Students may not hold credit for both PSYC 7012 and the former PSYC 7010.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.
Mutually Exclusive: PSYC 7010

PSYC 7014 Ethics, History and Profession of School Psychology 2 3 cr
A continuation of the examination of fundamental concepts and issues of professional School Psychology. Ethical, professional, regulatory and legal issues pertaining to the practice of school psychology are examined. Also examined are the history of school psychology and the organization of educational systems. Students may not hold credit for both PSYC 7014 and the former PSYC 7010.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.
Mutually Exclusive: PSYC 7010

PSYC 7022 Psycho-educational Assessment and Measurement 1 3 cr
Designed to provide students with training in the basic principles of psychological assessment and related measurement concepts, highlighting the process of data-based decision making. Emphasis will be placed on how information from a variety of psycho-educational sources is used to identify profiles for planning intervention programs. Students may not hold credit for both PSYC 7022 and the former PSYC 7020.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.
Mutually Exclusive: PSYC 7020

PSYC 7024 Psycho-educational Assessment and Measurement 2 3 cr
A continuation of training in the basic principles of psychological assessment and related measurement concepts, highlighting the process of data-based decision making. Emphasis will be placed on how information from a variety of psycho-educational sources is used to identify profiles for planning intervention programs. Students may not hold credit for both PSYC 7024 and the former PSYC 7020.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7022 (C+) ; permission of instructor required for non-School Psychology students.
Mutually Exclusive: PSYC 7020

PSYC 7030 Learning and Cognitive Impairment 3 cr
An examination of cognitive and medical conditions that have a direct impact on learning. These include (but are not limited to) learning disabilities in reading, writing, and mathematics, and other conditions involving neurodivergence (e.g., in intelligence, attention, prenatal exposure to substances, and autism), as well as co-occurring conditions. Diagnostic models, compensatory interventions, and social, behavioural, and affective consequences will be considered.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.

PSYC 7040 Teaching Strategies, Learning Styles, and Academic Remediation 3 cr
Provides an overview of basic theories of learning as applied to effective classroom instruction. Knowledge of individual differences in learning and principles of best practices in classroom instruction will be applied to the development of effective and curriculum adaptations for students with specific academic problems.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.

PSYC 7050 Junior Practicum in School Psychology 3 cr
Supervised practice with school children in a field setting. Emphasis on development of skills in assessing intelligence, academic skills and social-emotional difficulties, and on communication of findings to parents, teachers, and school administrators through written and verbal reports. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PSYC 7060 Senior Practicum in School Psychology 6 cr
Supervised practice in a school setting. The focus is on development of skills relevant to case conceptualization, intervention, and supervision of junior practicum students. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: PSYC 7050, permission of instructor.

PSYC 7070 Social, Emotional, and Personality Assessment of Children/Youth 3 cr
An overview of theory, research, and the educational implications of social, emotional, and personality assessment of children and adolescents. A variety of methods are examined with an emphasis on empirically-supported practices in the assessment of psychopathology and socio-emotional functions.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.

PSYC 7080 Child/Youth Psychopathology 3 cr
Examines mental health conditions, covering a range of internalizing and externalizing disorders in children and youth. Biopsychosocial and ecological models, risk and resiliency, and developmental and cultural issues are examined. Structured and semi-structured diagnostic interviews are reviewed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.

PSYC 7082 Intervening with Children and Social Systems 3 cr
Examines psychotherapy with social systems, including children, families, and groups. A lifespan perspective will be employed. Diversity issues within each relevant social grouping will be highlighted. Restricted to students in clinical or school psychology.

PSYC 7090 Behavioural Assessment and Intervention in School Settings 3 cr
Behavioural management strategies and techniques for children and adolescents who present with serious disruptive and/or emotional and behavioural disorders in schools. A wide range of techniques and strategies are considered.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.

PSYC 7120 Consultation and Supervision 3 cr
An examination of theories and models of school-based consultation and collaboration. Practice with techniques and procedures associated with effective consultation with teachers, school administrators, and parents.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.

PSYC 7130 School Psychology Research Design and Program Evaluation 3 cr
Provides students with knowledge and skills needed to understand, design, and conduct evaluations of intervention programs for individuals experiencing academic or behaviour difficulties in school. Addresses the aims, theories and methods of program evaluation, including relevant research design and statistical methods.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.

PSYC 7140 Clinical Research Design 3 cr
This course addresses issues of research design relevant to clinical research. Topics include reliability and validity of measurement, correlational, quasi-experimental, and experimental designs, clinical significance, and power analysis. Students complete a research proposal relevant to their thesis interests.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.

PSYC 7150 Readings in Autism Spectrum Disorders 3 cr
Students will read recent research in Autism Spectrum Disorders, acquire skills to critically evaluate empirical evidence, and examine implications for practice. Among the topics covered will be assessment, diagnosis, epidemiology, and applied behaviour analysis early intervention.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PSYC 7160 Cross-Cultural Social Psychology 3 cr
Cross-cultural psychology is the critical and comparative study of the linkages between cultural norms and thoughts, feeling and behaviour. This course focuses on Cross-cultural Social Psychology. Therefore, the assigned readings deal with topics that Social Psychology in general examines.

PSYC 7170 Theories of Close Relationships 3 cr
Students will be exposed to the theories that apply to the initiation, development, maintenance, and dissolution of relationships. The primary focus will be on evolutionary theory, attachment styles, communal and exchange relationships, equity theory, interdependence theory and the investment model, attributional theories, and theories of love.

PSYC 7180 Self-Regulation and Health 3 cr
This course examines how self-regulatory processes such as goal-setting and self-awareness can affect behaviours that promote or undermine human health. A wide range of health-related behaviours is considered such as smoking, exercise, safe-sex practices, and eating.

PSYC 7190 Social Psychology and Health 3 cr
This course considers health from a social psychological perspective. Weekly readings and discussion will focus on social cognitive processes and social influence processes that may mediate between stress and illness or may direct people's judgments of their health and choices of health-related behaviours.

PSYC 7192 Psychology of Health and Aging 3 cr
This course considers how adults adapt to the challenges of aging and the accompanying health problems. Seminar discussions will focus on selected psychological theories and related empirical literature regarding belief systems that operate in the face of health- and age-related challenges. Students may not hold credit for both PSYC 7192 and PSYC 7310 with the topic "Health and Aging."

PSYC 7200 Quantitative Methods in Psychology 1 3 cr
An introduction to descriptive and inferential statistics as it relates to the analysis of psychological data. Topics such as shapes of distributions, measures of central tendency and variability, hypothesis testing, and interval estimation, single and multifactor analyses, classical and robust methods of analysis will be discussed.

PSYC 7210 Quantitative Methods in Psychology 2 3 cr
Applied statistics for psychologists, with a focus on regression analysis, linear models, and generalized linear models. Emphasis will be placed on the application of statistical methods and computer software in psychological research. Not to be held with the former PSYC 8420.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7200 or permission of instructor.
Equiv To: PSYC 8420

PSYC 7220 Autism Practicum 1 3 cr
Graduate students will be taught to provide applied behavior analysis training for children with autism. Students will be taught many of the skills expected of tutors and senior tutors in the St. Amant Applied Behavior Analysis Program for Children with Autism.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PSYC 7230 Autism Practicum 2 3 cr
Graduate students will learn to supervise tutors and parents providing applied behavior analysis training for children with autism. Students will be taught many of the skills expected of a clinical consultant in the St. Amant Applied Behavior Analysis Program for Children with Autism.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7220 and permission of instructor.

PSYC 7240 Developmental Disabilities Practicum 1 3 cr
Students will work closely with behavior analysts in the Psychology Department at St. Amant to assess problems, design and execute appropriate interventions, and conduct follow-ups for persons with developmental disabilities.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PSYC 7250 Developmental Disabilities Practicum 2 3 cr
Graduate students will work closely with behavior analysts in the Psychology Department at St. Amant in the provision of applied behavior analysis consultation services for front line staff caring for persons with developmental disabilities.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7240 and permission of instructor.

PSYC 7260 Case Conceptualization and Communication 1 0 cr
In this course students will be exposed to the theory and practice of case conceptualization and communication. Students are required to be present for presentations of clinical cases and participate in discussions of them. Grading is Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.

PSYC 7270 Case Conceptualization and Communication 2 0 cr
In this course students will be exposed to the theory and practice of case conceptualization and communication. Students are required to be present for presentations of clinical cases and participate in discussions of them. Grading is Pass/Fail.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.

PSYC 7280 History and Systems of Psychology 3 cr
A survey of the major contemporary systems of psychology and their history.

PSYC 7290 Psychopathology and Diagnosis 3 cr
Advanced study of abnormal behaviour, diagnostic approaches, and related research. Not to be held with the former PSYC 7870.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.
Equiv To: PSYC 7870

PSYC 7300 Applied Behavior Analysis in Developmental Disabilities 3 cr
Students will read recent applied behavior analytic research in behavioral assessments and interventions for people with developmental disabilities, acquire skills to critically evaluate empirical evidence, and examine implications for practice. Students may not hold credit for both PSYC 7300 and PSYC 7310 with the topic "Research in Developmental Disabilities."
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PSYC 7310 Current Topics 1 3 cr
An intensive study of the contemporary research and theory in a selected field of psychology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

PSYC 7320 Foundations of Evidence-Based Treatment 3 cr
This course is designed to provide students with both a knowledge/evidence base for the foundations of psychotherapy and practical skills that will prepare them for more advanced learning via supervised work with clients. Not to be held with the former PSYC 8410.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.
Equiv To: PSYC 8410

PSYC 7330 Cognitive Development 3 cr
You will gain an advanced understanding of core theories and fundamental issues in cognitive development research. You will also gain an in-depth understanding of a particular cognitive developmental research issue of your choice.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7340 Sensory Processes 1 3 cr
An intensive review of current research and theories in visual processes. Both behavioural and physiological aspects of vision will be considered.

PSYC 7350 Sensory Processes 2 3 cr
An intensive review of current theories and research in audition, smell, taste, and the cutaneous senses.

PSYC 7362 Ethics and Professional Issues in Applied Behaviour Analysis and Psychology 3 cr
This course is intended to provide an introduction to ethical and professional issues relevant to the science and practice of applied behaviour analysis and psychology. Students in this course will become familiar with the code of ethics for behaviour analysts and psychologists; relevant Provincial legislations; examine ethical issues pertaining to practice and research with humans; and examine essential skills to be an effective professional.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PSYC 7380 Advanced Research Design 3 cr
The use of randomized subjects, block, factorial, latin square, and repeated measures designs in psychological research is discussed. Ancillary topics considered are unbalanced designs, multiple linear regression, magnitude estimation and simultaneous inference. Students will also use statistical packages to analyze data from psychological experiments.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 8420 or permission of instructor.

PSYC 7400 Measurement and Scaling Theory 3 cr
Discussion of measurement theory, data theory, and scaling models.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: the former PSYC 7390 or permission of instructor.

PSYC 7410 Advanced Psychometric Theory 3 cr
Current theory and research in psychometrics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7400 or permission of instructor.

PSYC 7420 Multivariate Methods in Psychology 3 cr
Designing and analyzing behavioural science experiments containing multiple dependent (criterion) and independent (predictor) variables is discussed. The use of statistical packages is illustrated.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7210 or the former PSYC 8420 or permission of instructor.

PSYC 7430 Advanced Physiological Psychology 3 cr
The physiological correlates of sensation, perception, learning, motivation, and complex behaviour.

PSYC 7470 Advanced Developmental Psychology 3 cr
Theory and research in contemporary developmental psychology.

PSYC 7492 Psychology of Addiction 3 cr
This course allows for advanced study in an integrative psychology of addictive disorders. Topics will include the history, epidemiology, psychopharmacology, and biological and psychosocial etiologies of addictive behaviours. Evidence-based treatments will also be covered.

PSYC 7520 Ethics and Professional Issues in Clinical Psychology 3 cr
Study of professional issues in clinical psychology. Historical development and present status of clinical psychology; what defines a profession; ethics codes, standards of practice, and legal requirements; training, internships, and accreditation; professional organizations, registration, and advocacy; employment in public and private sectors. Grading is Pass/Fail. Not to be held with the former PSYC 8070.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.
Equiv To: PSYC 8070

PSYC 7550 Intellectual and Cognitive Assessment 3 cr
This course will provide clinical students with a thorough overview of key issues and clinical knowledge related to intellectual and cognitive assessment of children and adults. Learning will take place through a combination of lectures, course readings, discussion, group exercises, student presentations, and hands-on practical experience with cognitive tests. Not to be held with the former PSYC 8150.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.
Equiv To: PSYC 8150

PSYC 7560 Personality and Psychological Assessment 3 cr
This course will provide clinical students with a thorough overview of key issues and clinical knowledge related to personality and psychological assessment of youth and adults. Learning will take place through a combination of lectures, course readings, discussions, group exercises, student presentations, and hands-on practical experience with personality and psychological tests. Not to be held with the former PSYC 8160.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.
Equiv To: PSYC 8160

PSYC 7570 Skinner's Writings 3 cr
The course will cover basic behavioural principles and procedures, and examine Skinner's behavioural interpretations of complex human behaviours and social phenomena.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PSYC 7620 Person X Situation Interactionism 3 cr
We will first explore research demonstrating the impact of personality and situations, separately, on behavior. We will then examine the debate that arose about whether understanding the person or the situation would have the most scientific merit. We spend the remainder (and majority) of the course discussing the theories and research that arose from that debate. The majority of this research has an interactionist perspective, taking both the person and his/her situation into account. Students may not hold credit for both PSYC 7620 and PSYC 7310 with the topic "Person X Situation Interactionism."

PSYC 7650 Theory and Research in Personality 3 cr
A lecture and reading course designed to familiarize the student with the concepts and operations associated with various approaches to the study of individual differences and patterns of difference in behaviour; emphasis is placed on research and that function of theory which generates research.

PSYC 7660 Intergroup Relations 3 cr
This course examines intergroup relations from a social psychological perspective. Key topics include sources of prejudice and discrimination, the "target's" perspective, and strategies for reducing prejudice and discrimination. Activities may include participating in class discussions, giving presentations, and writing several short papers and a research proposal. Students may not hold credit for both PSYC 7660 and PSYC 7310 when titled "Intergroup Relations."

PSYC 7670 Seminar in Personality 1 3 cr
An intensive examination of the current methods and research arising from the classical theories of personality.

PSYC 7680 Seminar in Personality 2 3 cr
An examination of individual difference variables suggested by the various personality theories. Particular emphasis will be given to current research and theory.

PSYC 7700 Problems in Psychological Research 3 cr
No desciption available for this course.

PSYC 7710 Problems in Psychological Research 3 cr
No desciption available for this course.

PSYC 7720 Problems in Psychological Research 3 cr
No desciption available for this course.

PSYC 7730 Problems in Psychological Research 3 cr
No desciption available for this course.

PSYC 7740 Problems in Psychological Research 3 cr
No desciption available for this course.

PSYC 7750 Problems in Psychological Research 3 cr
No desciption available for this course.

PSYC 7760 Problems in Psychological Research 3 cr
No desciption available for this course.

PSYC 7770 Problems in Psychological Research 3 cr
No desciption available for this course.

PSYC 7780 M.A. Thesis Proposal Development 0 cr
Students registering for this course will work under the supervision of their advisor to prepare a complete draft of the M.A. Thesis Research Proposal. Students enrolled in a thesis-based M.A. program in Psychology must register for this course in one of their first four (4) terms of full-time study. The course must culminate in submission of a complete draft of the M.A. Thesis Research Proposal to all members of the thesis advisory committee. This course will be graded on a pass/fail basis as determined by majority opinion of the thesis advisory committee.

PSYC 7790 Ph.D. Dissertation Proposal Development 0 cr
Students registering for this course will work under the supervision of their advisor to prepare a complete draft of the Ph.D. Dissertation Research Proposal. Ph.D. students must register for this course in one of their first eight (8) terms of full-time study. The course must culminate in submission of a complete draft of the Ph.D. Dissertation Research Proposal to all members of the thesis advisory committee. This course will be graded on a pass/fail basis as determined by majority opinion of the thesis advisory committee.

PSYC 7800 Seminar in Quantitative Methods in Psychology 1 3 cr
Special topics and recent advances in the design and analysis of behavioural science data will be discussed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7760 or permission of instructor.

PSYC 7810 Seminar in Quantitative Methods in Psychology 2 3 cr
An extension of the material covered in PSYC 7800 with particular emphasis on quantitative techniques typically employed in such areas as discrimination learning, personality, etc.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7760 or permission of instructor.

PSYC 7820 Interventions I 3 cr
This course examines empirically-supported interventions ranging from primary through tertiary prevention/intervention efforts directed at individuals, groups, and families, as well as classroom- and school-based intervention and prevention programs to promote a range of adaptive outcomes and intervene in a range of maladaptive pathways.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-School Psychology students.

PSYC 7830 Interventions II 3 cr
This course examines empirically-supported interventions ranging from primary through tertiary prevention/intervention efforts directed at individuals, groups, and families, as well as classroom- and school-based intervention and prevention programs to promote a range of adaptive outcomes (e.g., social competence, positive peer relations) and intervene in a range of maladaptive pathways (e.g., development of internalizing and externalizing problems and disorders). The course briefly introduces some specific programs available to assist in intervention design; however, the focus is on broad theoretical principles and aspects of evidence-based perspectives. Opportunities to integrate assessment and intervention will be presented throughout the course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 7820 (C+).

PSYC 7900 Foundations of Health Psychology 3 cr
For advanced students in psychology seeking specialized expertise in health, this course will review major topics such as the human body, the mind/brain connection, research methods, psychology and health care, terminal illness, pain and chronic disease, stress/coping, and health-related behaviours.

PSYC 7910 Clerkship-Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7920 Clerkship-Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7930 Clerkship-Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7940 Clerkship-Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7950 Clerkship-Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7952 Clerkship-Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7954 Clerkship-Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7956 Clerkship-Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the clinical training program. Direct client contact to provide experience in assessment and therapy, based on case conceptualization and supervision by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7958 Clerkship Practicum in Clinical Psychology 0 cr
Supervised practice in a clinical service facility operated by the university or approved by the training program. Direct client contact to provide experience in assessment and therapy based on case conceptualization and supervised by clinical faculty. Enrollment normally restricted to students in Clinical Psychology. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

PSYC 7980 Internship in Clinical Psychology 0 cr
Supervised practice in a clinical setting outside the university involving more responsible, more autonomous, and more professional work than is present in either clerkship or practicum.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: four terms of PSYC 7910 - PSYC 7950.

PSYC 7990 The Psychology of Language 3 cr
Examination of recent advances in the study of human language use. Topics such as memory for meaning, language development and language comprehension will emphasize the interactions between modern cognitive psychology and linguistics.

PSYC 8040 Psychology of Aging 3 cr
An intensive review of current research and theory. Biological, psychological, and social aspects of aging are related to each other.

PSYC 8050 Human Brain Functions 3 cr
The physiological basis of human cognitive processes is discussed from various perspectives. Different theories and different research strategies are discussed critically.

PSYC 8080 Case Conceptualization and Communication 3 3 cr
In this course students will learn the theory and practice of case conceptualization and communication. Students will prepare and present clinical cases using well-defined models of treatment and case formulation strategies.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.

PSYC 8090 Clinical Supervision in Psychology 3 cr
This course will review the major models, ethical issues, and recommended strategies and practices of clinical supervision. Learning modalities will include discussion of readings, role-playing, and supervised supervision of student clinicians. Pass/Fail course.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.

PSYC 8100 Social and Community Intervention 3 cr
A general introduction to community psychology and community mental health. Historical, conceptual, and philosophical underpinnings of community psychology and community mental health; community assessment and intervention; alternative approaches to contemporary social problems; understanding social policy and the role of the public sector; community research methods. Not to be held with the former PSYC 8170.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.
Equiv To: PSYC 8170

PSYC 8110 Program Evaluation and Consultation 3 cr
An overview of program evaluation and consultation as major areas of applied psychological practice; analysis of contemporary social and health problems; development, implementation, and evaluation of human service programs; understanding human service organizations; the role of consultant and common types of consultation; ethical issues in program evaluation and consultation. Not to be held with the former PSYC 8180.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.
Equiv To: PSYC 8180

PSYC 8200 Development and Its Deviations 1 3 cr
Developmental deviations will be related to such factors as genetic influences, physiological development, early experiences, language, intellectual and mental abilities, social and ethnic influences, parent-child interactions, and peer group interactions. Methods of special treatment will be considered.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.

PSYC 8212 Verbal Behaviour 3 cr
This seminar critically examines the concepts developed by B.F. Skinner in his classical work "Verbal Behaviour."
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor.

PSYC 8220 Topics in Abnormal Psychology 3 cr
An in-depth study of various areas in the field of psychopathology.

PSYC 8230 Clinical Neuropsychology 3 cr
The understanding and evaluation of cognitive, sensory, and motor functions as they relate to cerebral dysfunction.

PSYC 8240 Seminar in Behaviour Modification 3 cr
This seminar deals with a variety of specific topics in behaviour modification.

PSYC 8250 Practical Applications of Behaviour Modification 3 cr
This course deals with the design, implementation, and evaluation of program packages, based on behaviour modification, to different population and problem areas.

PSYC 8260 Individual Organism Research Methodology 3 cr
An extensive coverage of the methods by which behaviour can be studied in individual organisms, including the rationale for the use of such methods as opposed to methods involving the averaging of group data.

PSYC 8270 Seminar in Basic Operant Research 3 cr
This seminar deals with selected topics in basic operant research.

PSYC 8280 Supervised Field Study in Behaviour Modification 1 3 cr
Supervised training will take place in a service facility typically located off the University campus. Students will work closely with a supervisor in assessing a problem, designing and executing an intervention program and conducting a follow-up.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of the instructor.

PSYC 8282 Supervised Field Study in Behaviour Modification 1 3 cr
Supervised training will occur in a setting typically located off campus. Students will work closely with a supervisor in assessing a problem, designing and executing an intervention program and conducting a follow-up with clients without developmental disabilities or autism.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

PSYC 8290 Supervised Field Study in Behaviour Modification 2 3 cr
Supervised training will take place in a service facility typically located off the University campus. Students will work closely with a supervisor in assessing a problem, designing and executing an appropriate intervention program and conducting a follow up.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of the instructor.

PSYC 8292 Field Study in Behaviour Modification 2 3 cr
Supervised training will occur in a setting typically located off campus. Students will work closely with a supervisor in assessing a problem, designing and executing an intervention program and conducting a follow-up with clients without developmental disabilities or autism.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written consent of instructor.

PSYC 8300 Behavioural Assessment 3 cr
This course teaches students how to conduct behavioural assessment as a necessary feature of the three interrelated processes of problem identification, program design and outcome evaluation in the application of behaviour modification techniques.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of the instructor.

PSYC 8330 Family Therapy Seminar 3 cr
This course deals with both family theory and practice by reviewing the current literature on family systems and providing case discussions, peer supervision and small group simulated tasks.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Corequisite: current enrollment in PSYC 7910 - PSYC 7950 or GRAD 7030 or permission of the instructor.

PSYC 8370 Logic of Research Design 3 cr
A survey of nonstatistical issues in research design, focusing on precise formulation of research questions and implication for research design. Design problems from various psychological areas are solved by students in the laboratory the purpose being to strengthen critical ability and to identify commonalities across areas in methodological approach. Broader philosophical issues relevant to research design, such as the meaning of causality, are also addressed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: PSYC 8420 or permission of instructor.

PSYC 8380 History and Theory in Developmental Psychology 3 cr
A history of fundamental concepts in developmental psychology with consideration of important philosophical, theoretical, and empirical influences on the contemporary field.

PSYC 8430 Cognitive Behaviour Therapy 3 cr
Students learn the theory and practice of empirically supported therapies that emphasize cognitive and behavioural methods. Opportunities for CBT skill development, which can be applied to a wide range of psychological problems, are provided. Students may not hold credit for PSYC 8430 and any of: the former PSYC 8340 or the former PSYC 8400.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: permission of instructor required for non-Clinical students.

Religion (RLGN)

RLGN 7020 Special Topics 1 3 cr
Description not available for this course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

RLGN 7030 Special Topics 2 3 cr
Description not available for this course. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

RLGN 7080 Seminar in Research Methods and Theory 3 cr
Description not available for this course.

RLGN 7130 Seminar in Hinduism 3 cr
An advanced study of select aspects of the Hindu tradition.

RLGN 7140 Seminar in Buddhism 3 cr
An advanced study of select aspects of the Buddhist tradition.

RLGN 7150 Seminar in Islam 3 cr
An advanced seminar in the study of Islam.

RLGN 7160 Seminar in Judaism 3 cr
An advanced seminar in the study of Judaism.

RLGN 7170 Seminar in Formative Christianity 3 cr
Advanced studies in selected aspects of formative Christianity.

RLGN 7180 Seminar in Early Modern, Modern and Contemporary Christianity 3 cr
Advanced studies in developments of Western Christianity since 1500.

RLGN 7190 Seminar in Religion and Philosophy 3 cr
Examination of the relation between religion and philosophy through selected figures and themes.

RLGN 7200 Seminar in Religion and Psychology 3 cr
Examination of selected developments in psychology and religion and religion and/or in psychoanalysis and the study of religion.

RLGN 7210 Studies in Religious Concepts and Practices 3 cr
Advanced study of selected religious concepts and practices topics.

RLGN 7220 Seminar in Religions and Historiography 3 cr
Advanced studies in the interactions among specific religious traditions, ideologies and historiography.

RLGN 7230 Thesis Seminar 3 cr
Exploration of a range of academic writing techniques and of their theoretical aspects.

RLGN 7240 Textual Studies in Original Languages 3 cr
Close study of primary texts in their original languages.

RLGN 7250 Research Seminar 3 cr
Study of selected theoretical and methodological issues in the study of religion.

RLGN 7270 Seminar in Christianity 3 cr
Critical study or selected historical and/or theoretical issues in selected periods of Christianity.

RLGN 7300 Seminar in Religion and Culture 3 cr
Study of selected religion-and-culture figures, issues, or themes.

RLGN 8310 Seminar in Judaism 3 cr
Selected issues in the study of Judaism.

RLGN 9062 UW REL-4701 Interpreting the Quran 3 cr
Course may be taken as part of a Master of Religion program offered jointly with the University of Winnipeg.

RLGN 9190 UW REL 3999 Languages for Religious Studies 6 cr
Course may be taken as part of a Master of Religion program offered jointly with the University of Winnipeg.

Restorative Dentistry (RSTD)

RSTD 7010 Dental Laboratory Technology 4 cr
This course is intended to assure that residents have a comprehensive overview of conventional, and digital dental laboratory technologies. It consists of lecture, seminar and laboratory periods and will review foundational and digital dental laboratory techniques and its application to prosthodontics. The student will fabricate prosthetic devices for patients.

RSTD 7012 Advanced Prosthodontic Seminars 1-TMD, Occlusion, Articulators 1 cr
This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to TMD, occlusion and articulators. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

RSTD 7014 Classic Fixed Prosthodontic Literature Review 1 cr
This course will consider classic concepts underlying the current practice of fixed prosthodontics by reviewing assigned readings from the scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

RSTD 7016 Clinical Practice in Prosthodontics 1 8 cr
This course consists of an integrated, patient-centered clinical programs. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary speciality prosthodontic practice.

RSTD 7018 Current Prosthodontic Literature Review 1 1 cr
This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

RSTD 7022 Advanced Prosthodontic Seminars 3 - Removable Partial Dentures, Dental Materials 1 cr
This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to removable partial dentures, dental materials. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

RSTD 7024 Classic Complete Denture Prosthodontic Literature Review 1 cr
This course will consider concepts underlying the current practice of complete denture prosthodontics by reviewing assigned readings from the scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

RSTD 7026 Clinical Practice in Prosthodontics 3 8 cr
This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary speciality prosthodontic practice. Pre-requisite is successful completion of RSTD 7116.

RSTD 7028 Current Prosthodontic Literature Review 3 1 cr
This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

RSTD 7032 Advanced Prosthodontic Seminars 5 - Implant Prosthodontics 1 cr
This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to implant prosthodontics. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

RSTD 7036 Clinical Practice in Prosthodontics 5 8 cr
This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking experiences for a contemporary speciality prosthodontic practice. Prerequisite is successful completion of RSTD 7126.

RSTD 7038 Current Prosthodontic Literature Review 5 1 cr
This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

RSTD 7100 Dental Materials 6 cr
This course consists of lecture, seminar and laboratory periods. The student will examine the current literature relevant to the program and will gain experience in the testing procedures used to evaluate dental materials. A project involving the evaluation of a dental material will be required of each student.

RSTD 7112 Advanced Prosthodontic Seminar 2 - Complete Dentures, Maxillofacial Prosthodontics 1 cr
This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to complete dentures, speech pathology, geriatric dentistry and maxillofacial prosthodontics. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

RSTD 7114 Classic Removable Partial Denture Prosthodontic Literature Review 1 cr
This course will consider classic concepts underlying the current practice of removable partial denture prosthodontics by reviewing assigned readings from the scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

RSTD 7116 Clinical Practice in Prosthodontics 2 8 cr
This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary speciality prosthodontic practice. Prerequisite is successful completion for RSTD 7016.

RSTD 7118 Current Prosthodontic Literature Review 2 1 cr
This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them. Prerequisite is successful completion of RSTD 7018.

RSTD 7122 Advanced Prosthodontic Seminars 4 - Conventional Fixed Prosthodontics 1 cr
This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to conventional fixed prosthodontics. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

RSTD 7124 Classic Articulator and Maxillofacial Literature Review 1 cr
This course will consider classic concepts underlying the current practice of articulators and maxillofacial prosthodontics by reviewing assigned readings from the scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them.

RSTD 7126 Clinical Practice in Prosthodontics 4 8 cr
This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary speciality prosthodontic practice. Prerequisite is successful completion of RSTD 7026.

RSTD 7128 Current Prosthodontic Literature Review 4 1 cr
This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them. Prerequisite is successful completion of RSTD 7028.

RSTD 7132 Advanced Prosthodontic Seminars 6- Practice Management, Ethics, and Sleep Medicine 1 cr
This course consists of lecture, seminar, clinical, and laboratory sessions to review contemporary prosthodontics as it relates to practice management, ethics, infection control, and sleep medicine. The student will examine relevant current texts and review articles. The student will be required to lead sessions on the evaluation of these topics as related to prosthetic dentistry.

RSTD 7136 Clinical Practice in Prosthodontics 6 8 cr
This course consists of an integrated, patient-centered clinical program. Seminars will analyze diagnosis and treatment plan cases using records of individuals seeking prosthodontic treatment. Patients will be assigned to students to provide the required clinical experiences for a contemporary specialty prosthodontic practice. Pre-requisite is successful completion of RSTD 7036.

RSTD 7138 Current Prosthodontic Literature Review 6 1 cr
This course will consider the concepts underlying the current practice of prosthodontics by reviewing assigned readings from the current scientific literature. Students will be expected to apply principles of critical evaluation in order to identify and appreciate the limitations of these studies and thus the limitations of the current concepts derived from them. Prerequisite is the successful completion of RSTD 7038.

RSTD 7150 Orthodontic Materials 3 cr
Students will examine in depth through lectures, seminars and research of the current literature, those materials used by orthodontists in their clinical practice. The relationship between materials properties and clinical performance will be emphasized.

Russian (Slavic Studies) (RUSN)

RUSN 6000 Language Reading Test 0 cr
This course is graded pass/fail.

Slavic Studies (Pol,Rusn,Ukrn) (SLAV)

SLAV 7200 Literary and Cultural Theory 3 cr
A survey of major theoretical approaches to German and Slavic literatures and cultures. Discusses the aesthetics of Enlightenment and Idealism, Nietzsche, Freud, Russian Formalism, Prague Structuralism, hermeneutics, semiotics, dialogism (Bakhtin), the Frankfurt School, collective memory, gender studies, post-colonialism, and multi-culturalism.

SLAV 7210 Introduction to Second Language Acquisition and Methods of Language Teaching 3 cr
This course provides a general introduction to theories and approaches in second language acquisition (SLA) and methods of language teaching specifically designed for MA students of German and Slavic languages.

SLAV 7400 Selected Topics in Slavic Literatures 3 cr
Seminar discussions of various problems in Slavic literatures as related to the students' field of research. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

SLAV 7410 Seminar in Contemporary Slavic Literatures 3 cr
Selected problems in contemporary Slavic literatures as related to the students' field of research.

SLAV 7420 Studies in Modernism 3 cr
A study of the representative works of modernism in Slavic countries with a focus on the years 1890-1930. The styles and movements that characterized the period will be examined. References will be made to the art of the period.

SLAV 7430 Special Topics in Slavic Studies 3 cr
An independent study course in Slavic literatures, cultures, or folklore. Topics will be selected to meet students' research or study interests. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

Social Work (SWRK)

SWRK 6010 Data Analysis for Social Work Research 3 cr
An intermediate course in the analysis of quantitative social work data. The course will emphasize application and interpretation of analytical techniques useful in the pursuit of social justice through social work.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre or co-requisite: SWRK 7620 or instructor approval. Priority to be provided to MSW students in course registration.

SWRK 6020 Social Work Practice Seminar 6 cr
Introduces students to ecological and other generalist practice models in the provision of social services. Attention is given to key contextual aspects of social work practice such as gender, poverty, and culture in the study of professional roles and ethics. Intervention modalities considered range from direct practice with individuals to strategies of community change.

SWRK 6030 Canadian Social Welfare Policy 6 cr
An examination of the elements of ideology, and the application of competing ideological systems in the study of social welfare policy. This course also examines the history of Canadian social welfare from European contact to contemporary developments.

SWRK 6040 Anti-Oppressive Social Work Practice 3 cr
An Overview of Anti-Oppressive social work practice. Focuses on application of this approach to a wide variety of service participants and the connections between policy and practice. Implications for the profession are explored.

SWRK 6050 Field Practice 6 cr
An educationally focused practice experience where the student carries a sustained professional role as a beginning practitioner. Requires 450 hours of time including an orientation program, engagement in practicum activities under supervision, educational contact time with the field instructor and evaluation of performance. For Pre-MSW students only. Subject to satisfactory completion and reports, students will be graded on a pass/fail basis.

SWRK 6060 Social Work and Aboriginal People 3 cr
Focuses on the analysis of social welfare policy and social work practice from an Aboriginal perspective. The influence of colonization as an attribute of oppression is examined along with an exploration of developments oriented to the goal of decolonization and empowerment.

SWRK 6070 Qualitative Research in Social Work 3 cr
An intermediate course in qualitative approaches for research for the pursuit of social justice through social work. It will examine various approaches to the design and analysis of qualitative social work research.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre or co-requisite: SWRK 7620 or instructor approval. Priority to be provided to MSW students in course registration.

SWRK 7002 Foundation in Social Work Practice and the Profession 3 cr
Situates the social work profession within the context of a settler colonial state and examines the intersection of knowledge, theory, values, ethics, and power relations that form the foundation of the profession and shape interventions and norms within social service agencies.

SWRK 7180 Advanced Field Practice 0 cr
A student directed specialized practice experience where the focus is on the integration of theory, research and practice. Requires 450 hours of supervised, advanced practice following approval of a proposal developed by the student. Students will be graded on a pass/fail basis. Pre or Co Requisite: SWRK 7190.

SWRK 7190 Integrating Theory and Research in Advanced Field Practice 3 cr
Requires application of theory and research to analysis of selected activities undertaken in Advanced Field Practice. Pre or Co- requisite: SWRK 7180.

SWRK 7220 Selected Topics in Social Work 3 cr
A tutorial approach which permits the graduate student to develop an area of concentration independently but with assistance and mutual work with a faculty member.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: written permission of instructor.

SWRK 7230 Problem Seminar 3 cr
Students focus on the theory, social policy and social work practice implications of a given social problem area.

SWRK 7280 Readings in Social Work and Social Welfare Research 3 cr
A tutorial in specialized research methodology to be offered only to students who have highly specialized research interests which are not commonly offered in other courses.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: an introductory research course and consent of the instructor.

SWRK 7300 Clinical Evaluation of Social Work Interventions 3 cr
This course examines methods of evaluating clinical social work interventions with individuals, couples, families, and other small groups.

SWRK 7430 Evaluation Research in Social Work Practice 3 cr
A course focused on the development of knowledge and skills in applying methods of evaluation to policies and programs in the human services. Analytical and practice skills in program evaluation are developed through an examination of theories, models, and case study applications.

SWRK 7440 Policy Analysis in Social Work Practice 3 cr
A course focused on the development of knowledge and skills for planning social policies and social programs with special attention to the importance of policy analysis. Analytical and practice skills are developed through case studies and a critical review of theories and models.

SWRK 7450 Advanced Research Methods 1 3 cr
An overview of design and methodology options in quantitative and qualitative social work research, with special emphasis on practice in community settings.

SWRK 7460 Advanced Research Methods 2 3 cr
Advanced quantitative analysis of social work policy and practice, with emphasis on multivariate analysis techniques.

SWRK 7470 Advanced Research Methods 3 3 cr
Advanced qualitative analysis of social work policy and practice, with emphasis on analyzing appropriate case studies, and interview and documentary information.

SWRK 7520 Dissertation Seminar 0 cr
A required non-credit course on special issues to support students in preparing their formal dissertation proposals. Topics include scholarly findings, research methodology, and data analysis. Graded as P/F.

SWRK 7530 Critical Issues in Social Work 3 cr
An opportunity for students to engage in the study of a specific field or topic in social work. Taken as a course, tutorial or offered as a special Ph.D. seminar when numbers permit.

SWRK 7600 Critical Perspectives and Social Work 3 cr
This course focuses on exploring the relationship between critical social theories and social work. Students will examine social work theory and practice from critical theoretical perspectives and analyze their current and past policy and practice experiences from these perspectives. Priority to be provided to MSW students in course registration.
Mutually Exclusive: SWRK 7720

SWRK 7620 Paradigms, Methodologies, and Methods for Social Work Research 3 cr
An intermediate course that provides an overview of research paradigms, methodologies, and methods. Students will be prepared to employ research as critical consumers, mobilizers, and producers of knowledge to further social work based on social justice. Priority to be provided to MSW students in course registration.

SWRK 7630 Advanced Social Work Practice with Individuals and Families 3 cr
This course provides the foundation for advanced social work practice with individuals and families in their social contexts. Perspectives for intervention are examined and critiqued including ecological, systems, postmodern, indigenous, and structural approaches.

SWRK 7640 Application and Critique of Theory and Research in SocialWork Practice with Individuals and Families 3 cr
Using supervised practice experiences, this course develops advanced skills for assessment, intervention, and evaluation of direct practice with individuals and families within the context of social work's commitment to addressing social injustice.

SWRK 7650 Advanced Social Work Practice with Groups 3 cr
This course will increase students' knowledge and skill in reflexive social work practice with groups in a broad range of health and social service settings.

SWRK 7660 Social Work Perspectives on Practice with Networks, Neighbourhoods and Communities 3 cr
This course aims to develop students' knowledge and skills in reflexive social work practice with networks, neighbourhoods and communities.

SWRK 7670 Community Mobilization: Application of Concepts in Social Work Practice with Groups, Networks and Co 3 cr
This course integrates theories about community with practical application. Students will also gain knowledge of agencies based in community practice. This course will extend over two terms.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre or co-requisite: SWRK 7660.

SWRK 7700 Grounding Our Foundation in Indigenous Knowledges and Social Work 0 cr
This course provides a general overview of Indigenous approaches to healing and helping. Connections to social work practice/policy are identified. The course is focused on experiential and participatory learning and involves a 5-day intensive retreat. Students will be graded on a pass/fail basis.

SWRK 7710 Remembering Our Histories 3 cr
This course will set a foundation for understanding historical perspectives of Indigenous knowledges in relation to social work. Raise awareness of traditional and spiritual; connections to languages, families, communities, nations, and lands to establish an understanding of "relationship" in Indigenous ways of being. Students will be graded on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7700 (P).

SWRK 7720 Critical Theory and Indigenous Peoples 3 cr
This course will review critical social theories with primary focus on colonialism and social justice, in relation to social work. Anti-colonialism, anti-oppressive approaches, feminist approaches and other critical perspectives, in relation to Indigenous Peoples, will be examined from Indigenous perspectives. May not hold with SWRK 7600. Mutually Exclusive: SWRK 7600.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7700 (P).
Mutually Exclusive: SWRK 7600

SWRK 7730 Indigenous Research Methodologies and Knowledge Development 3 cr
This course will examine research epistemologies and methodologies based in Indigenous ontologies and social experiences in the context of social work research with Indigenous Peoples. The course will present the influences of colonization, Indigenism, and decolonization on knowledge development.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7700 (P).

SWRK 7740 Indigenous Peoples, Identity, and Social Work 3 cr
This course will give students an understanding of how they see themselves and how their relationships at individual, family, clan, community, and nation levels contribute to identity development. It deepens understanding of how people view themselves and react in contemporary contexts. Students will be graded on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7700 (P).

SWRK 7750 Indigeneity, Power, Privilege, and Social Work 3 cr
This course will examine identity development influenced by gender, ethnicity, Indigeneity, internalized oppression, aboriginalism, internalized domination, whiteness, white privilege, racism, and in relation to social policies and social work practice with individuals, families, communities, and nations.

SWRK 7760 Project/Thesis Seminar 1 0 cr
This course will focus on initiating knowledge development in practice settings. Students will learn to apply Indigenous and critical social work epistemological and methodological concepts by finalizing their project/thesis proposal and beginning their projects. Students will be graded on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7730 (C+).

SWRK 7770 Social Challenges and Indigenous Helping Practices 3 cr
This course will teach students how Indigenous Elders, traditional teachers and /or medicine people identify, interpret and meet current social challenges. The course looks at how positive identities and relationships are fostered through traditional Indigenous helping practices and how they currently inform social work. Students will be graded on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7740 (P).

SWRK 7780 Social Work, Social Challenges, and Indigenous Peoples 3 cr
This course will focus on Indigenous knowledges shared through group participation in Indigenous helping practices. It looks at how these practices could be supported by social workers in communities and organizations for people facing social challenges. Students will be graded on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7770 (P).

SWRK 7790 Project/Thesis Seminar 2 0 cr
This course will continue to guide students on their application/research of Indigenous practice knowledges in their chosen projects/theses and to ensure the student is actively implementing the projects/theses as outlined in their approved proposals. Students will be graded on a pass/fail basis.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7760 (P).

SWRK 7800 Indigenism 3 cr
This course will focus on Indigenous knowledges shared through group participation in Indigenous helping practices. It looks at how these practices could be supported by social workers in communities and organizations for people facing social challenges. Students will be graded on a pass/fail basis.

SWRK 7810 Anti-Colonial Social Work 3 cr
This course will focus on design and participation in community service and research projects. This course will challenge the student to include reflection, application, and evaluation of critical social work knowledge and research on how the student project (s) and/or action(s) contribute to development of anticolonialism, social justice, and Indigenism.

SWRK 7820 Project Seminar 3 3 cr
Students in this course will complete their major projects. Students will also complete a written paper and oral presentation addressing their respective projects.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SWRK 7790 (P).

SWRK 8010 Perspectives on Knowledge for Social Work 3 cr
A seminar focusing on the definition, development, legitimization, and transmission of knowledge for social work practice. A range of approaches will be discussed including scientific approaches (logical positivism), post-modern approaches, indigenous and culturally based approaches, and critical approaches.

SWRK 8020 Development of the Social Work Profession 3 cr
A seminar focusing on the development of social work from mainstream and marginalized people's perspectives (including Aboriginal people and women), and its relationship; to current professional issues. Histories, ideological, economic, theoretical, and political factors will be considered in examining selected fields of practice.

SWRK 8030 Advanced Qualitative Research in Social Work 6 cr
A seminar and laboratory course in the understanding and use of a wide range of epistemological and methodological approaches to research related to social work. This will include a focus on the views and practices of Aboriginal peoples, women, and other marginalized persons.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: a Master's level qualitative research course (B) taken within five years or instructor approval.

SWRK 8040 Advanced Quantitative Research in Social Work 6 cr
A seminar and laboratory course in the use of multivariate statistics in analyzing experimental, quasi-experimental, survey and administrative data related to social policy, social services, and social work practice.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Pre-requisite: Master's level quantitative research course (B) taken within five years or instructor approval.

SWRK 8100 Social Work Past and Present: Trends, Institutions and Practices 3 cr
Development of Social Work in Canada, with international comparisons, through examination of social processes and intellectual trends shaping the profession, such as colonization, Indigenous issues, feminism, neoliberalism and globalization, and highlighting of practices, methods and models. Cannot be held with SWRK 8020.
Equiv To: SWRK 8020

SWRK 8200 Indigenizing and Decolonizing the Global Academy: The Role of Social Work Education and Practice 3 cr
This Seminar will provide a context for understanding the connections between colonization, education and Indigenous peoples around the world. It is designed to engage students in a deeper, critical and fuller discussion and understanding of the world (ontology) and beliefs about knowledge (epistemology), and values (axiology) with regards to Indigenization, colonization and decolonization of the academy of social work

Sociology (SOC)

SOC 7110 Seminar in Sociology of Religion 3 cr
A comparative and analytical study of religion with particular reference to such areas as integration, change, ideology, value orientation, normative structures, social class, intergroup relations, personality systems.

SOC 7120 Seminar in Sociology of Education 3 cr
An analytical treatment of the influence of education, as a basic social institution, on society its functions in socialization, change, control, social mobility, social progress, etc. and the influence of society on the organization, content, and goals of education.

SOC 7160 Selected Topics 3 cr
An intensive study of the contemporary research and theory in a selected field of sociology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

SOC 7190 Seminar in Selected Topics in Sociological Theory 3 cr
The content of this course may vary from year to year, depending on interest and need. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

SOC 7240 Seminar in Selected Topics in Research and Methods 3 cr
The content of this course may vary from year to year, depending on interest and need. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

SOC 7280 Seminar in Theoretical Criminology 3 cr
An advanced course dealing with theory and research in the field of criminology with emphasis placed on an evaluation of existing theories of crime, law, and social justice.

SOC 7300 Seminar in the Sociology of Law and Social Control 3 cr
A critical examination of classical and contemporary sociological theories of law and social control and their import for understanding substantive issues relating to the law-society relationship.

SOC 7310 Seminar in Intergroup Relations 3 cr
This seminar will provide an opportunity for detailed study of intergroup (religious, racial, and ethnic) relations in contemporary Canadian society. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

SOC 7320 Seminar in Political Sociology 3 cr
A critical examination of classical and contemporary sociological theories and current empirical research concerned with the relationship between politics and society. Particular emphasis is placed upon the origin, development, nature and future of the welfare state from a comparative perspective.

SOC 7340 Seminar in the Sociology of the Family 3 cr
This seminar investigates various conceptual frameworks which are developing in the study of the family today, including research problems and procedures unique to such study. Various approaches will be examined.

SOC 7350 Advanced Reading and Research 1 3 cr
Directed study of a selected area within the general field of sociology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

SOC 7370 Issues in Health Care Seminar 3 cr
An advanced seminar designed to examine current issues in health care. The content of this course may vary from year to year depending on interest and need.

SOC 7390 Survey Research Methods 3 cr
Through the use of secondary electronic data sources, students learn all aspects of survey research. Topics covered include: sampling, question and questionnaire construction, index construction and scaling methods, techniques of establishing validity and reliability, order effects, conducting interviews, coding, data analysis, and budgeting. Previous experience with multivariate data analysis at the undergraduate level is strongly encouraged.

SOC 7400 Advanced Quantitative Research Methods 3 cr
This course emphasizes the understanding and application of advanced quantitative data analysis techniques to sociological research problems. Issues in regression decomposition, path analysis, log-linear analysis, discriminant function analysis, principal components and factor analysis, as well as non-parametric statistical tests are covered as they relate to sociological research concerns. Statistical packages are used to illustrate sociological examples.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: [SOC 4570 or the former SOC 4480] or written consent of department head.

SOC 7420 Qualitative Research Methods for Sociological Inquiry 3 cr
This course provides an overview of methodologies of qualitative research for sociological inquiry. Discussion focuses on the ontological and epistemological foundations of qualitative methods and the variety of approaches and techniques available within interpretive and critical paradigms. Issues such as sampling, reflexivity, analysis, interpretation, theoretical development, rigor and representation will be discussed.

SOC 7430 Seminar in Classical Sociological Theory 3 cr
A critical examination of certain central aspects of the sociological tradition. The content of this course may vary from year to year depending on interest and need.

SOC 7440 Seminar in Contemporary Sociological Theory 3 cr
An examination of current trends in sociological theory. The content of this course may vary from year to year depending on interest and need.

SOC 7450 Selected Topics in Criminology 3 cr
An advanced seminar in a selected area of criminology. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.

SOC 7470 Evaluating Social Programs 3 cr
Designed as a course in applied sociology, students will review the models and methodologies used for evaluating social programs. The course will introduce the necessary conceptual and analytic tools to design and carry out program evaluations.

SOC 7480 Social Inequality 3 cr
A critical examination of classical and contemporary theories and current empirical research concerned with various dimensions of social inequality (such as class, gender and race) and social stratification from a comparative perspective.

SOC 7490 Globalization 3 cr
A sociological examination of the globalization of trade, production and finance, including the creation of multilateral trading blocs (e.g., APEC, EU, NAFTA) and international organizations (e.g., WTO, IMF, the World Bank) and their impact upon social inequality, the welfare state and the environment in developed and developing nations.

Soil Science (SOIL)

SOIL 7100 Soil Physical Chemistry 3 cr
Topics of discussion: ionic equilibria, ion exchange and ionic transport including soil-plant relationships.

SOIL 7110 Soil Physics I - General 3 cr
First and second laws of thermodynamics, Darcy's law, saturated and unsaturated flow, simulation modeling of moisture movement, soil aeration, water availability to seeds, strength properties of unsaturated soils.

SOIL 7130 Soil Chemistry 3 cr
Chemical equilibria and soil solution chemistry; surface chemistry and solid-solution reactions; mineral structure, colloid chemistry and analytical techniques; fate of nutrients and pollutants; reactions of fertilizers.

SOIL 7140 Soil Nitrogen 3 cr
Discussion of organic and inorganic nitrogen in soils, nitrogen fixation, mineralization, nitrification, denitrification, and plant availability of soil nitrogen. Students will be required to review literature on assigned topics.

SOIL 7170 Agricultural Micrometeorology 3 cr
Discussion of mass and energy transport in the boundary layer, evaporation and transpiration of water, light absorption and transmission of carbon dioxide in plant canopies and climate change impacts on micrometeorological processes.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: SOIL 3060 and/or consent of instructor.

SOIL 7180 Environmental Chemistry of Pesticides and Related Compounds 3 cr
Pesticide chemodynamics, biological and non-biological transformations of pesticides in water, soil and biota, bioaccumulation and food chain distribution of pesticides and related xenobiotics and environmental fate models will be discussed.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Consent of instructor.

SOIL 7210 Topics in Soil Fertility 3 cr
Advanced study of behaviour and crop requirements for selected nutrients (except for nitrogen, as covered in SOIL 7140. Students will be required to review literature and prepare seminars on assigned topics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisites: SOIL 4520 or consent of instructor.

SOIL 7220 Principles of Scientific Research and Communication 3 cr
Principles of scientific research; management skills; writing skills; oral and poster presentation; preparation of research proposal and thesis (pass/fail). These topics will focus on aspects of soil science and will give students experience in writing and presenting scientific material to increase their professionalism as soil scientists.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Consent of instructor.

SOIL 7230 Topics in Landscape and Processes I 3 cr
An examination of methods of landscape characterization and of landscape processes, their impacts, interactions and modelling.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Consent of instructor.

SOIL 7240 Topics in Landscape Processes II 3 cr
A continuation of SOIL 7230.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Consent of instructor.

SOIL 7250 Topics in Soil Science 3 cr
Several courses in soil science are sectioned into modules. Modules of one credit hour on special topics are also available. Students may select three modules from the various courses or from special topics for SOIL 7250.

SOIL 7270 Advanced Soil Ecology 3 cr
Examine the role of soil organisms and their communities in decomposition, elemental cycling, and pathogen/pest suppression in managed and natural soil systems. Understand methods of studying biochemical activity and communities in soil. Take a specific research topic of choice and develop an understanding of the organisms and communities, environmental controls of key biological processes involved and apply your knowledge to resolving a specific research issue.

Statistics (STAT)

STAT 7060 Advanced Theory of Probability 3 cr
Probability as measure, convolutions, limit laws, conditional probability and expectation, law of large numbers and other selected topics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

STAT 7080 Advanced Statistical Inference 3 cr
Selected topics from recent developments in parametric and/or non-parametric statistical inference.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

STAT 7100 Analysis of Discrete Data 3 cr
Inference concerning discrete distributions, analysis of categorical data, and other selected topics.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

STAT 7140 Linear Models 3 cr
Theory of linear models, regression analysis, and analysis of variance.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

STAT 7200 Multivariate Analysis 1 3 cr
Multivariate normal distribution, Hotelling's T2, Classification methods, principal components and canonical correlations.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

STAT 7220 Seminar in Statistics 1 3 cr
A seminar course on new development in statistics.

STAT 7240 Advanced Topics in Statistics 1 3 cr
Special advanced research topics in statistics.

STAT 7250 Advanced Topics in Statistics 2 3 cr
Special advanced research topics in statistics.

STAT 7260 Time Series 3 cr
The auto-correlation function and spectrum, various processes, model identification, estimation and forecasting.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

STAT 7270 Bayesian Inference 3 cr
Bayesian decision problems, priors, Jeffrey's Rule, robustness of posteriors, Bayesian justification of ANOVA.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of instructor.

STAT 7290 Statistical Consulting 3 cr
The role of a statistics consultant. Practical consulting experience.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of department.

STAT 7310 Research Tools for Statistics 0 cr
This course provides instruction in the use of a number of tools required for graduate level research in statistics. Topics include instruction in various software, such as LaTex, R, SAS, etc. as well as Library usage, presentation and communication skills.

STAT 7320 Research Project in Statistics 3 cr
This course will provide the student with practical experience in doing research in the statistical sciences. Students will be matched with a faculty advisor and carry out a research project. Deliverables include a final research report and a presentation to the department.

STAT 7350 Advanced Topics in Statistics 3 1.5 cr
Special advanced research topics in statistics.

STAT 7360 Advanced Topics in Statistics 4 1.5 cr
Special advanced research topics in statistics.

Supply Chain Management (SCM)

SCM 7010 Advanced Supply Chain Management 3 cr
Provides students at the graduate level with an in-depth examination of the major issues associated with the management of supply chains. The course content includes both managerial and technical matters, and addresses issues such as the importance of supply chain management in meeting global competition, internet and e-business application, supply chain integration and relationships, sharing risks and rewards, and the reduction of variance in supply chain performance.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: A degree in business or discipline related to supply chain management or approval by instructor.

SCM 7014 Seminar in Production and Operations Management 3 cr
To critically review, gain a deeper understanding and academic appreciation of the core POM literature; to develop mature researchable ideas that fill research gaps in the area of POM as identified in the articles and in-class discussions; to pursue research topics in POM and conceptualize, craft, and shape intriguing research questions that may lead to long-term researchable programs; to present their research ideas/articles and critique the merits/shortcomings of others' research work in the area of POM

SCM 7016 Simulation Models for Operations Manageement 3 cr
Simulation is a powerful tool to analyze complex systems. Simulation is a method to mimic the behavior of real systems. This course introduces computer-based simulation and modeling with applications to supply chain and operations management where decision making can be enhanced through the modeling and analysis of complex systems. The course assumes a previous knowledge of probability and statistics.

SCM 7018 Seminar in Production & Operations Management 3 cr
The course emphasises empirical/conceptual research and aims to provide an opportunity for graduate students to gain a deeper understanding and an academic appreciation of the Production and Operations Management's literature. This course is a research-based seminar that is designed to be the driver for the graduate students' foundational research knowledge in Production and Operations Management.

SCM 7020 Seminar in Supply Chain Management 3 cr
This seminar course is designed to expose graduate students to cutting-edge research in supply chain management. It aims to develop an academic appreciation of the area literature by emphasizing empirical and conceptual papers and by assisting students in conducting independent research, critiquing articles, developing novel research ideas, and writing research papers that are both relevant and academically rigorous.

SCM 7030 DOC SEM IN SC SUSTAINABILITY 3 cr
This course adopts a broad view of supply chain sustainability. From a functional perspective, SCM includes logistics, purchasing, and a few aspects of marketing. Sustainability is also a multi-dimensional concept, spanning environmental, cultural, social and economic elements. The course has a special focus on sustainable transportation. Various research methods, from content analysis to analytical modeling to survey research are discussed. Delivery happens via a variety of interactive lectures, individual and small group exercises, discussions, and writing/presenting a supply chain sustainability term paper.

SCM 7040 Logistics Management 3 cr
Logistics Management is the part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements. This course provides a practical, management perspective of the following areas of logistics: distribution, transportation, international logistics, inventory control, sustainable logistics practices, key performance indicators, supply chain finance, leadership in a supply chain role, and an introduction to logistics technology including RFID and ERP systems.

SCM 7042 Purchasing and Procurement in Supply Chains 3 cr
Purchasing and procurement functions are about much more than bringing goods and services into an organization. They are the foundation of strong, collaborative relationships with suppliers. Since many companies source products from around the globe more frequently than ever, a procurement manager needs strong capabilities. These skills cannot just be learned on the job: they need to be taught. As well, the value of procurement is now recognized as an integral part of cost control within the organization. In this course, you'll learn the basics of procurement, including what a supply chain looks like, the purchasing cycle, essential tools and strategies for making the best purchasing relationships work, managing bids, and more.

SCM 7044 Supply Relationship Management 3 cr
Successful Supplier Relationship Management (SRM) needs effective contract and performance management in place for the selected suppliers. Also, a successful SRM programme needs full engagement from the key stakeholders across the business. However, engaging internal stakeholders in SRM activities is challenging and the ability to sell internally and externally is essential. Since maximising the value that is captured from major suppliers delivers significant business benefits, this course covers the approaches needed internally and externally to secure value delivery from suppliers.

SCM 7046 Sustainable Supply Chain Management 3 cr
Sustainability efforts can open many opportunities for businesses—product innovation can lead to first-mover advantage, environmental product differentiation can open new markets, green sourcing and waste reduction can reduce operating cost, etc. At the same time, they can present significant challenges—governments and communities are imposing higher standards on pollution, resource exploitation, etc. This course aims to provide students with an understanding of the sustainability challenges and opportunities facing supply chains today. We will took at some of the factors that are contributing to the adoption of sustainability strategies, such as legislations that are penalizing negative environmental and social impacts, and society's expectations of business in terms of health, human rights, and the environment. The supply chains today cannot be concerned only with creating shareholder value; their performance is also measured in terms of social, environmental and economic impact.

SCM 7048 Advanced Supply Chain Management 3 cr
Advanced Supply Chain Management (ASCM) provides a theoretical basis for multi-disciplinary analysis and improvement of supply chains and networks, focusing especially on supply chain modelling methods to support managerial decision making. Supply chains are often globally interconnected systems with a large variety of complex relationships. This is also affecting the ways in which goods and services are developed, produced, processed and delivered to the market.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: MSCI 7140.

SCM 7050 Co-op in Supply Chain Management and Logistics 3 cr
This course aims to provide students with a hands-on experience in Supply Chain Management and Logistics. Students will be placed in positions within organizations operating in the Province of Manitoba and Canada to experience supply chain management and logistics management in practice. A pre-employment training to students without significant work experience in North America may be required. The pre-employment training and placement of students will be performed in coordination with the Asper School of Business Graduate Co-operative Education Program, always striving lo match the interests of the student with the interests of the hosting organization. This course is graded on a pass/fail basis.

SCM 7052 Applied Project in Supply Chain Management and Logistics 3 cr
This course aims to provide students with a hands-on experience in Supply Chain Management and Logistics. Students will explore and address real issues in the supply chain and logistics sector in the context of the Province of Manitoba and/or Canada under the supervision of a Faculty Member of the Department of Supply Chain Management, Asper School of Business, and in close connection with the target organization. This course is graded on a pass/fail basis.

Surgery (SURG)

SURG 7012 Surgery- Major Course in Surgical Problems (Part A & Part B) 3 cr
A series of short-course modules offered by surgeon-researchers covering the diverse aspects of knowledge translation in surgical research and practice. A compulsory course for MSc students in the Department of Surgery.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: Students outside of Surgery require Graduate Chair permission.

SURG 7022 Surgery- Specialty Rounds in Surgical Problems (Part A & Part B) 3 cr
Under the mentorship of the student's advisor, independent study on the practice, theory and critical reflection methods of surgical research through the attendance to relevant specialty rounds and journal clubs; directed reading and reflective writings. Permission from Graduate Chair.

SURG 7030 Advanced Surgery 3 cr
Designed to expose students to specific surgery issues that are relevant to their thesis research at Department of Surgery Subspecialty Rounds; demonstrating an understanding of knowledge development and exchange, critical appraisal, practice-based evidence and their connections to translational activities. Permission from Graduate Chair.

SURG 7040 Surgical Epidemiology and Biostatistics 3 cr
Prepare students to design studies suitable for a wide variety of research questions including diagnostic, etiologic and prognostic, and treatment outcomes, with focus on surgical issues. It should also provide the students with the essential biostatistical and epidemiologic tools to critique medical literature. The evaluation will be based on submission of a complete proposal to answer a research question of each student's choice.

Women's and Gender Studies (WOMN)

WOMN 7170 Directed Readings in Women's Studies 3 cr
Advanced study of selected topics in Women's Studies from an interdisciplinary perspective. The content of the course may vary from year to year and will be arranged by the coordinator of the Women's and Gender Studies Program in consultation with the appropriate representatives of departments. Students must complete a Reading Course Application Form available from the Women's and Gender Studies office. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of the Women's and Gender Studies coordinator and the instructor.

WOMN 7270 Advanced Topics in Women's Studies 3 cr
Advanced study of selected topics in Women's Studies from an interdisciplinary perspective. The content of the course may vary from year to year and will be arranged by the coordinator of the Women's and Gender Studies Program in consultation with the appropriate representatives of departments. Interdisciplinary analysis of contemporary issues, debates and theories in Women's Studies. Topics will vary from year to year and may include, for example, gender theory, sexualities, or feminist pedagodgy. The course content may vary. Students can earn multiple credits for this course only when the topic subtitle is different.
PR/CR: A minimum grade of C is required unless otherwise indicated.
Prerequisite: consent of the Women's and Gender Studies coordinator and course instructor.

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