

Department of Soil Science 362 Ellis Building Winnipeg, Manitoba Canada R3T 2N2

Syllabus

SOIL 7250 T10

Topics in Soil Science:

Nutrient Dynamics in Diversified Cropping Systems

Term: Winter 2024



COURSE DETAILS

Course Title & Number: SOIL 7250 T10

Topics in Soil Science:

Nutrient Dynamics in Diversified Cropping Systems

Number of Credit Hours: 3 credit hours

Class Times & Days of Week: Monday/Wednesday: 2:30 – 3:45 pm

Location for 108 Animal Science Building

classes/labs/tutorials: Option for blended attendance format (Zoom/Teams) on request

Pre-Requisites: Permission of Instructor

Instructor Contact Information

Instructor(s) Name & Dr. Joanne Thiessen Martens

Preferred Form of Address: You are welcome to address me by my first name (Joanne) in all

communications, including in person and in email correspondence.

Office Location: 378 Ellis Building

Office Hours or Availability: Send an email to set up a meeting time. I will also be available

immediately after most class sessions for short meetings.

Office Phone No. 204-806-2777 (cell)

Email: J.ThiessenMartens@umanitoba.ca

Contact: Email is the best way to contact me. I will do my best to respond to

emails within 24 hours when received on weekdays (Mon-Fri) or 48

hours when received on the weekend or holidays. For urgent

matters, please call or text.

Traditional Territory and Land Acknowledgement

The University of Manitoba campuses are located on original lands of Anishinaabeg, Cree, Oji-Cree, Dakota and Dene peoples, and on the homeland of the Métis Nation. We respect the Treaties that were made on these territories, we acknowledge the harms and mistakes of the past, and we dedicate ourselves to move forward in partnership with Indigenous communities in a spirit of reconciliation and collaboration.

I personally acknowledge that my place of work (University of Manitoba campuses and research sites) and my personal residence are located in the heartland of the Red River Métis nation and the traditional territories of other Indigenous peoples of the region. I am continuing to learn about the traumas experienced by Indigenous peoples and also the richness of Indigenous cultures, especially their relationships with the land.

As students of agriculture, we are students of the land. One of the goals of this course is to learn about appropriate soil and nutrient management that helps to meet human needs while respecting and caring for the natural environment. Seeing ourselves as part of the land, rather than only land managers, can help foster a relationship built on reciprocity rather than extractive resource use. I believe such an approach will help guide modern agriculture to greater sustainability.

Equity and Inclusion Commitment

I am committed to upholding and advancing equity, diversity, and inclusion in my teaching. I respect your identities (e.g., race, gender identity, sexual orientation, ability, etc.) and commit to working against any form of oppression or discrimination based on these or other categories. I recognize that I am still learning and developing in this area, and so I invite your feedback on my actions related to equity and inclusion in this course. If you feel comfortable doing so, please contact me directly with your concerns. To submit anonymous feedback, you may place a typed, unsigned note in my mailbox in the Soil Science office (Room 362 Ellis) and/or contact the Soil Science department head.

COURSE DESCRIPTION

U of M Course Calendar Description

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.

General Course Description

This course focuses on nutrient cycling processes in diversified cropping systems. The technical content of this course is aimed at the graduate level, building on students' prior training in agricultural sciences. After completing this course, students will have an advanced level of knowledge in the general principles and specific processes and mechanisms involved in nutrient cycling in agricultural systems, especially the complex soil–fertilizer–plant–animal interactions that may occur in highly diversified and integrated production systems.

The course will involve in-class sessions with all students as well as a significant independent study component. Students will be expected to participate actively in class and lead some discussions with their peers. In addition to acquiring technical knowledge, students will develop critical thinking and communication skills by evaluating and discussing assigned readings from the scientific literature, preparing a literature review on a key topic related to their interests, and giving an oral presentation of their literature review.

Course Learning Outcomes

On completion of this course, you should be able to:

- 1. Understand and explain key concepts regarding the nature of diversified cropping systems, the nutrient cycling processes in such systems, and implications for management, focusing on Canadian Prairie agroecosystems.
- 2. Summarize, evaluate, and critique research papers related to nutrient dynamics in diversified systems, identifying the contributions to knowledge as well as weaknesses and/or next steps.
- 3. Formulate perceptive questions on specific topics related to nutrient dynamics in diversified systems, based on relevant readings.
- 4. Summarize and integrate various knowledge sources in a focused literature review on a topic developed through consultation with the instructor.
- 5. Provide constructive feedback on literature reviews written by fellow students.
- 6. Prepare and deliver an oral presentation on your chosen topic.
- 7. Facilitate class discussions on your chosen topic and others.

Course Topics

Course topics will include a selection from the following, based on students' interests and the instructor's discretion.

- 1. Overview of diversified cropping systems Canadian Prairies and beyond
 - a. Natural ecosystems as a guide
 - b. Diversification across time, space, and trophic levels
- 2. Overview of soil nutrient cycles
 - a. Plant nutrition and soil health
 - b. Environmental effects nutrient loss pathways and impacts
- 3. Overview of soil fertility management approaches simple to complex
 - a. Synthetic fertilizers
 - b. Organic soil amendments manure, compost, and so on
 - c. Biological nitrogen fixation using legumes
 - d. Soil biological fertility
 - e. Soil systemic fertility
- 4. Plant nutrient acquisition mechanisms and soil-fertilizer-plant interactions
 - a. Competition
 - b. Complementarity and niche differentiation
 - c. Facilitation
 - d. Interactions among nutrients
- 5. Nutrient dynamics in diversified cropping systems
 - a. Cover crops
 - b. Annual intercrops
 - c. Perennial grains and forages
 - d. Integrated crop-livestock systems
 - e. Tree-based intercropping
 - f. Landscape-scale interactions

Readings will be assigned from book chapters, peer-reviewed research, and other sources deemed suitable. See the list below for selected potential readings.

Course Format and Assignments

Class Sessions

The learning process will generally consist of an introduction to a topic, accompanied by readings, short written assignments, and an interactive discussion among the students and instructor. The class will generally meet twice per week for a total of about 20 sessions. Each session will be approximately 75 minutes in length and will involve one of three formats:

- 1. Introductory lectures and discussion by instructor
- 2. General overview of topic
 - a. Introduction to the topic by instructor or student
 - b. Oral presentation of literature review on the topic by instructor, guest lecturer, or student presenter
 - c. Discussion based on student written assignments (Assignment type 1 below)
- 3. Discussion of specific research papers related to topic
 - a. Overview of papers led by instructor
 - b. Discussion based on student written assignments (Assignment type 2 below)

In addition to group classes, a few sessions (4-6) will be devoted to meetings between individual students and the instructor to discuss students' chosen topics in greater depth, in the style of an independent study.

A detailed course schedule will be developed during the first two weeks of classes, in consultation with students.

Assignments

Short written assignment type 1: on general topics and review papers (approx. 5 assignments)

Compose three questions that could be asked to initiate discussion in the session. Ask "open-ended" or "thinking-type" questions that focus on analysis, creativity, adaptation, or evaluation. Questions should not be easily answered by a simple yes, no, or memorized fact and should not be directly asked or answered in the assigned review paper. The three questions should focus on the following three perspectives:

- 1) fundamental processes or mechanisms in that topic area this could include effects of temporal and spatial variability, interactions among system components (soils, organisms, climate), and so on
- 2) practical implications for agronomic production
- 3) practical implications for environmental protection or sustainability

All students (including the presenter, if applicable) shall complete the assignment. Assignments should be typed, single spaced, and fit on a single page. Assignments are due by email (or submitted in UM Learn - TBD) by the beginning of the corresponding class session.

Short written assignment type 2: on assigned scientific papers (approx. 5 assignments)

Complete the following activities for each of the assigned papers for a particular session:

- 1) Identify an important strength or contribution to knowledge in the paper. Briefly explain and justify (1 paragraph).
- 2) Identify a major weakness in the paper or the next logical step required to expand knowledge in the area. Briefly explain and justify (1 paragraph).

Assignments should be typed, single spaced, and fit on a single page. Assignments are due by email (or submitted in UM Learn - TBD) by the beginning of the corresponding class session.

Major Review Paper and Presentation

Students will choose one of the course topics from section 5 of the outline above (nutrient dynamics in diversified cropping systems) as the basis for their major review paper and presentation. Alternatively, students may suggest a topic not included in the list provided. In either case, each student must consult with the instructor to confirm their topic by the end of the second week of class (January 19).

1) Written Literature Review Paper

- Focus on 10 to 20 key papers that illustrate contemporary knowledge in the chosen topic.
- Papers should be 10 pages in length, excluding figures, tables and references, using an 11 point font and allowing a 1.5 line spacing to allow readers to add comments

- Provide an introduction, body, and summary or conclusion for the paper, plus a complete list of references. The paper should address the fundamental processes in that topic area, as well as the practical implications for agronomic production and environmental protection.
- Each student must <u>submit their proposed outline and initial reference list to the instructor at least three weeks prior to their presentation</u> to discuss the direction and scope of the paper. The instructor will provide verbal feedback and a grade for the outline.
- Each student will be required to submit two versions of their review paper:
 - the first version is distributed by email to the class and instructor one week before the oral presentation and is graded by the instructor;
 - the second version is revised based on feedback received from the instructor and fellow students and is graded by the instructor.
- Grammar, spelling and composition will be evaluated and considered as part of the grading criteria for the review paper (10% of mark for each version of the paper)

2) Oral Presentation of Literature Review

- Deliver a 45-minute presentation/lecture, based on the content of the review paper. The
 presentation does not need to cover all material in the review paper and can focus on key
 aspects the student wishes to present.
- Use standard practices for good oral presentations, with an obvious introduction, body and conclusion, as indicated on the evaluation sheet (provided to students at the beginning of the course).
- Facilitate a class discussion on the topic.

Textbook, Readings, and Course Materials

Students will be assigned selected readings, including book excerpts and articles from peer-reviewed journals. These include selections from the following (pending student interest in specific topics and publication of new resources):

Required Reading

- Kremen, C., Iles, A., & Bacon, C. (2012). Diversified Farming Systems: An Agroecological, Systems-based Alternative to Modern Industrial Agriculture. *Ecology and Society*, *17*(4), 44–44. https://doi.org/10.5751/ES-05103-170444
- Thiessen Martens, J. R., Entz, M. H., & Wonneck, M. D. (2015). Review: Redesigning Canadian prairie cropping systems for profitability, sustainability, and resilience. *Canadian Journal of Plant Science*, 95(6), 1049–1072. https://doi.org/10.4141/cjps-2014-173
- Drinkwater, L. E., & Snapp, S. S. (2007). Nutrients in agroecosystems: Rethinking the management paradigm. In Donald L. Sparks (Ed.), *Advances in Agronomy: Vol. Volume 92* (pp. 163–186). Academic Press. http://www.sciencedirect.com/science/article/pii/S0065211304920032
- Grant, C. A., Peterson, G. A., & Campbell, C. A. (2002). Nutrient Considerations for Diversified Cropping Systems in the Northern Great Plains. *Agronomy Journal*, *94*(2), 186–198. https://doi.org/10.2134/agronj2002.1860

Additional Reading

Additional readings will be selected from the following and/or other resources identified by students and the instructor:

Soil Fertility Management Approaches

- Abbott, L. K., & Murphy, D. V. (2007). What is Soil Biological Fertility? In L. K. Abbott & D. V. Murphy (Eds.), *Soil Biological Fertility* (pp. 1–15). Springer Netherlands. http://link.springer.com.proxy1.lib.umanitoba.ca/chapter/10.1007/978-1-4020-6619-1 1
- Anghinoni, I., & Vezzani, F. M. (2021). Systemic Soil Fertility as product of system self-organization resulting from management. *Rev. Bras. Ciênc. Solo, 45*, e0210090. https://doi.org/10.36783/18069657rbcs20210090
- Stewart, A. A., Little, S. M., Ominski, K. H., Wittenberg, K. M., & Janzen, H. H. (2009). Evaluating greenhouse gas mitigation practices in livestock systems: An illustration of a whole-farm approach. *Journal of Agricultural Science*, *147*, 367–382. https://doi.org/10.1017/s0021859609008764

Nutrient Dynamics in Diversified Cropping Systems

- Beaudette, C., Bradley, R. L., Whalen, J. K., McVetty, P. B. E., Vessey, K., & Smith, D. L. (2010). Tree-based intercropping does not compromise canola (Brassica napus L.) seed oil yield and reduces soil nitrous oxide emissions. *Agriculture, Ecosystems & Environment*, 139(1–2), 33–39. https://doi.org/10.1016/j.agee.2010.06.014
- Cicek, H., Thiessen Martens, J. R., Bamford, K. C., & Entz, M. H. (2014). Effects of grazing two green manure crop types in organic farming systems: N supply and productivity of following grain crops. Agriculture, Ecosystems & Environment, 190, 27–36. https://doi.org/10.1016/j.agee.2013.09.028
- Couëdel, A., Alletto, L., Tribouillois, H., & Justes, É. (2018). Cover crop crucifer-legume mixtures provide effective nitrate catch crop and nitrogen green manure ecosystem services. *Agriculture, Ecosystems & Environment*, 254, 50–59. https://doi.org/10.1016/j.agee.2017.11.017
- Crews, T. E. (2005). Perennial crops and endogenous nutrient supplies. *Renewable Agriculture and Food Systems*, 20(1), 25–37. https://doi.org/10.1079/RAF200497
- Hallama, M., Pekrun, C., Lambers, H., & Kandeler, E. (2018). Hidden miners the roles of cover crops and soil microorganisms in phosphorus cycling through agroecosystems. *Plant and Soil*. https://doi.org/10.1007/s11104-018-3810-7
- Hinsinger, P., Betencourt, E., Bernard, L., Brauman, A., Plassard, C., Shen, J., Tang, X., & Zhang, F. (2011). P for two, sharing a scarce resource: Soil phosphorus acquisition in the rhizosphere of intercropped species. *Plant Physiology*, *156*(3), 1078–1086. https://doi.org/10.1104/pp.111.175331
- Issah, G., Kimaro, A. A., Kort, J., & Knight, J. D. (2015). Nitrogen Transfer to Forage Crops from a Caragana Shelterbelt. *Forests*, 6(6), Article 6. https://doi.org/10.3390/f6061922
- Kronberg, S. L., & Ryschawy, J. (2019). Integration of Crop and Livestock Production in Temperate Regions to Improve Agroecosystem Functioning, Ecosystem Services, and Human Nutrition and Health. In *Agroecosystem Diversity* (pp. 247–256). Elsevier. https://doi.org/10.1016/B978-0-12-811050-8.00015-7

- Liu, J., Macrae, M. L., Elliott, J. A., Baulch, H. M., Wilson, H. F., & Kleinman, P. J. A. (2019). Impacts of Cover Crops and Crop Residues on Phosphorus Losses in Cold Climates: A Review. *Journal of Environmental Quality*, 48(4), 850–868. https://doi.org/10.2134/jeq2019.03.0119
- Robles-Aguilar, A. A., Schrey, S. D., Postma, J. A., Temperton, V. M., & Jablonowski, N. D. (2019). Phosphorus uptake from struvite is modulated by the nitrogen form applied. *Journal of Plant Nutrition and Soil Science*. https://doi.org/10.1002/jpln.201900109
- Russelle, M. P., Entz, M. H., & Franzluebbers, A. J. (2007). Reconsidering Integrated Crop–Livestock Systems in North America. *Agronomy Journal*, *99*(2), 325. https://doi.org/10.2134/agronj2006.0139
- Wang, X., Deng, X., Pu, T., Song, C., Yong, T., Yang, F., Sun, X., Liu, W., Yan, Y., Du, J., Liu, J., Su, K., & Yang, W. (2017). Contribution of interspecific interactions and phosphorus application to increasing soil phosphorus availability in relay intercropping systems. *Field Crops Research*, 204, 12–22. https://doi.org/10.1016/j.fcr.2016.12.020
- Zhou, X., Helmers, M. J., Asbjornsen, H., Kolka, R., Tomer, M. D., & Cruse, R. M. (2014). Nutrient removal by prairie filter strips in agricultural landscapes. *Journal of Soil and Water Conservation*, 69(1), 54–64. https://doi.org/10.2489/jswc.69.1.54

COURSE EVALUATION AND GRADING

Course element	Due date	% of final grade
Short written assignments (10)	Beginning of class, as assigned	30%
Participation in in-class discussions	Every class	15%
Participation in individual discussions	Individual meetings as scheduled	5%
Outline of review paper	3 weeks before oral presentation	5%
First version of review paper	1 week before presentation	20%
Oral presentation	TBD based on schedule of topics	15%
Revised version of review paper	Last day of classes (April 10)	10%

The instructor will provide feedback and grades on short written assignments within one week of submission. Feedback on the review paper outline will be provided orally while meeting with students individually at least 3 weeks before their presentations. Feedback and a grade for the first version of the review paper will be provided on the date of the student oral presentation.

Late Assignments

A 20% penalty will be assessed on the grade for each 24-hour period after the assignment is due, unless an extension has been granted before the due date. No points (0%) will be awarded for submissions received after the assignment is returned to the rest of the class.

Missed Assignments

If you miss a class and an assignment is given or due, it is still your responsibility to submit the assignment on time. A penalty will be assessed on late assignments as indicated above unless a full explanation is submitted ahead of the due date explaining exactly why you will not be able to submit the assignment on the due date.

Letter Grade Equivalency:

A+ (≥90%); A (80-89%); B+ (75-79%); B (70-74%); C+ (65-69%); C (60-64%); D (50-59%); F(<50%)

EXPECTATIONS

I EXPECT YOU TO:

- Read and understand the information in this syllabus.
- Attend and actively participate in class sessions regularly. Class attendance and participation is
 required to gain a full understanding of the course material. A portion of the final grade is based
 on in-class participation.
- Attend and actively participate in individual meetings with the instructor. These meetings will
 focus on development of your chosen topic for the literature review and oral presentation. A
 portion of the final grade is based on participation in and preparedness for this meetings.
- Prepare for class. The course materials will be provided to you ahead of each topic. You are
 expected to have read the assigned readings thoroughly and completed the associated
 assignment.
- Create and maintain a respectful learning environment: Sharing knowledge effectively requires
 mutual respect among students and the instructor. All communications and in-person
 interactions, in and outside of class, are expected to be respectful and professional. See the UM
 policy on Respectful Work and Learning Environment.
- Complete all coursework with academic integrity, as outlined below and on the UM website.
- **Communicate any difficulties, concerns, or criticisms** regarding the course with me as early as possible. This will make it more likely that we can work out a solution.

YOU CAN EXPECT ME TO:

- Treat all students with respect.
- Arrive at class sessions and individual meetings punctually and well-prepared.
- Grade assessments fairly and provide feedback in a timely manner.
- Respond to your communications in a timely manner.
- Be available for in-person, online, or phone meetings to discuss class material and assignments as needed, providing support to meet your learning goals.

COURSE POLICIES

Communications

You must obtain and use your University of Manitoba email account for all communication between yourself and the university. *I will send email messages only to your University of Manitoba email account.* All communication must comply with the Electronic Communication with Student Policy: http://umanitoba.ca/admin/governance/governing documents/community/electronic communication with students policy.html.

Email is my preferred form of communication to set up appointments or discuss issues related to the course. I will do my best to respond to all emails within 24 hours on weekdays and 48 hours on weekends/holidays. For urgent matters, you may phone or text me but I cannot guarantee an immediate response.

Academic Integrity

Each student in this course is expected to compete their coursework and programs of study with integrity by making a commitment to the six fundamental values of honesty, trust, fairness, respect, responsibility, and courage.

In this course, academic integrity looks like referencing the work of others that you have used and completing your assignments independently unless otherwise specified.

Please refer to these specific course requirements for academic integrity for individual work:

- 1. Complete your assignments independently unless otherwise specified. You must do your own work in all assignments without direct help from your class peers, family members, or from tutors that are not approved by the instructor. Use of artificial intelligence tools, including but not limited to ChatGPT and Grammarly, is not permitted unless explicitly specified. Failure to complete your work independently is considered *inappropriate collaboration* and/or *academic fraud*. If you are in need of assistance, please contact the instructor immediately for support and/or to arrange for approved supports.
- 2. Do not share course materials (e.g., notes, exam questions, assignment instructions, article) that have been created by the instructor or were authored by another. Sharing of such materials with your peers or with note-sharing services is a *violation of the Copyright law*.
- 3. Reference the work of others that you have used in your own work. To *plagiarize* is to take ideas or words of another person and pass them off as one's own. It is not necessary to state the source of well-known or easily verifiable facts, but you are expected to appropriately acknowledge the sources of ideas and expressions you use in your written work, whether quoted directly or paraphrased. Plagiarism applies to any written work, in traditional or electronic format, as well as orally or verbally presented work. This applies to images, diagrams, etc., as well as to written material, and to materials or information from Internet sources. To provide adequate and correct documentation is not only an indication of academic honesty but is also a courtesy which enables the reader to consult these sources with ease. Failure to provide appropriate citations constitutes *plagiarism*.
- 4. Do not submit assignments already graded in another course. This is considered *duplicate submission*.

Plagiarism, duplicate submission, inappropriate collaboration, academic fraud, and personation are violations of the Student Discipline Bylaw and will lead to the <u>serious disciplinary action</u>. Please read the section on Academic Integrity under UM Policies at the end of this syllabus. Visit the <u>Academic Calendar</u>, <u>Student Advocacy</u>, and <u>Academic Integrity</u> web pages for more information and support.

Accessibility

Please see the University of Manitoba's Accessibility information under "UM Learner Supports" in Schedule A at the end of this syllabus. You are also welcome to discuss any accessibility concerns you may have with me directly if you feel comfortable doing so.

Attendance

Regular class attendance is required to gain a full understanding of the course material. Failure to attend class regularly will result in a deduction from the points allocated to participation in discussions.

Assignment Extensions and Late Submissions

In case of illness or other extenuating circumstances that cause you to miss classes and/or due dates, please communicate with me directly first. In some cases, you may be required to follow the University of Manitoba's <u>Self-Declaration for Brief and Temporary Student Absences Policy and Procedure</u>. Note that

travel, vacations, work and other scheduled personal obligations are not considered extenuating circumstances.

If unforeseen events occur and you require an extension on an assignment, please contact me to explain the extenuating circumstances under which you are/were not able to meet the deadline.

See the Course Assignments and Evaluations section above for specific requirements and penalties for late or missed submissions.

Recording of lectures:

No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part, without permission from Dr. Thiessen Martens. Course materials (both paper and digital) are for the participant's private study. If you need to record lectures for accessibility or accommodation reasons, you are encouraged to discuss options with me or contact Student Accessibility Services to arrange an accommodation.

Copyright

Please respect copyright. Copyrighted content used in this course is appropriately acknowledged and used according to copyright laws and University guidelines. Copyrighted works, including those created by the instructor, are made available for private study and research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the Copyright Act applies or written permission has been confirmed. For more information, see the University's Copyright Office website at http://umanitoba.ca/copyright/ or contact umcopyright@umanitoba.ca/copyright/ or contact umcopyright@umanitoba.ca/copyright/

Voluntary Withdrawal

See more information about voluntary withdrawal under UM Policies at the end of this syllabus and take note of the following dates:

- Course drop deadline (100% refund; course does not appear on transcript): January 19, 2024
- Voluntary Withdrawal deadline (no refund; course appears as VW on transcript): March 20, 2024

UM POLICIES

The University of Manitoba has outlined policies and procedures governing the Responsibilities of Academic Staff with Regard to Students (ROASS). "Schedule A" outlines all relevant ROASS policies and can be found below, as well as in the UM Learn materials for this course (Content > Introduction and Syllabus).

UM LEARNER SUPPORTS

The University of Manitoba provides many types of support to help students thrive. In "Schedule A" (below and in UM Learn), you will find a select list of important supports for learners at the UM, both academic supports and otherwise. For a complete listing of all learner supports at the University of Manitoba, visit the Everything You Need to Thrive website.

SCHEDULE A (Revised February 17, 2023)

Contents

UM POLICIES Academic Calendar	-
Academic Integrity	14
Copyright	14
Grade Appeals	15
Intellectual Property	15
Program-Specific Regulations	15
Respectful Work and Learning Environment	15
Sexual Violence Policies	15
Voluntary Withdrawal	16
UM LEARNER SUPPORTS	
Academic Advising	16
Academic Learning Centre (ALC)	16
Basic Needs	17
English Language Centre	18
Health and Wellness	18
Winnipeg Urgent Physical and Mental Health Care	18
Student Counselling Centre (SCC)	18
Health and Wellness Office	19
Spiritual Care and Multifaith Centre	19
Student Support Case Management (SSCM)	19
University Health Service (UHS)	19
Student Services at Bannatyne Campus	19
Indigenous Students	20
International Students	20
Sexual Violence Support and Education	20
Student Accessibility Services (SAS)	20
Student Advocacy	20
University of Manitoba Libraries (UML)	21

UM Policies

As a student at the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school.

The University of Manitoba (UM) website's <u>Governing Documents</u> (https://umanitoba.ca/governance/governing-documents) is one important source of information, in particular the Academic and Students sections. The Student Advocacy office can also help you understand policies and procedures; find their information in the UM Learner Supports section below.

Academic Calendar

The <u>Academic Calendar</u> (https://umanitoba.ca/registrar/academic-calendar) is the University's official publication containing course descriptions, program and graduation requirements, as well as UM and faculty/school-specific rules, regulations and policies. In particular, familiarize yourself with the sections *University Policies and Procedures* and *General Academic Regulations*.

Academic Integrity

In addition to reviewing your instructor's academic integrity policy listed in their syllabus, you are expected to view the *General Academic Regulation* section within the <u>Academic Calendar</u> (https://umanitoba.ca/registrar/academic-calendar) and specifically read the regulation pertaining to Academic Integrity. Ask your instructor for additional information about demonstrating academic integrity in your academic work, and consult the following UM resources for more information and support:

- <u>Academic Integrity</u> (https://umanitoba.ca/student-supports/academic-supports/academic-integrity)
 - <u>Student Resources</u> (https://umanitoba.ca/student-supports/academicsupports/academic-integrity#resources-to-conduct-academic-work-with-integrity)
 - Academic Misconduct and How to Avoid It supports/academic-supports/academic-integrity#academic-misconduct-and-how-to-avoid-it)
- <u>Student Advocacy Office</u> (https://umanitoba.ca/student-supports/academic-supports/student-advocacy)

Copyright

All students are required to respect copyright as per Canada's *Copyright Act*. Staff and students play a key role in the University's copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world. The Copyright Office (https://umanitoba.ca/copyright/) provides copyright resources and support for all members of the University of Manitoba community.

Grade Appeals

If you have questions about your grades, talk to your instructor. There is a process for term work and final grade appeals. Note that you have the right to access your final examination scripts. See the Registrar's Office (https://umanitoba.ca/registrar/grades/appeal-grade) for more information including appeal deadline dates and the appeal form.

Intellectual Property

For information about rights and responsibilities regarding intellectual property view the Intellectual Property Policy (https://umanitoba.ca/governance/governing-documents/governing-documents-university-community#intellectual-property)

Program-Specific Regulations

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective <u>faculty/college/school</u> website (https://umanitoba.ca/academics).

Respectful Work and Learning Environment

The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected to conduct yourself in an appropriate and respectful manner. Policies governing UM community behaviour include:

- Respectful Work and Learning Environment (https://umanitoba.ca/about-um/respectful-work-and-learning-environment-policy)
- <u>Student Discipline</u> (https://umanitoba.ca/governance/governing-documents-students#student-discipline)
- <u>Violent or Threatening Behaviour</u> (https://umanitoba.ca/governance/governing-documents-students#violent-or-threatening-behaviour)

The UM website, <u>Engaging in Respectful Conduct</u> (https://umanitoba.ca/student-supports/respectful-conduct), includes more details about expectations for behaviours related to university activities.

Sexual Violence Policies

The UM has several policies and procedures that deal with the rights and responsibilities of the University community with regards to all forms of sexual violence. For a comprehensive list of policies and associated resources, visit the <u>Sexual Violence Resource Centre's information page</u> (https://umanitoba.ca/student-supports/sexual-violence-support-and-education/sexual-violence-get-informed). Please note that there are many supports available in addition to these policy documents (see UM Learner Supports).

Voluntary Withdrawal

Voluntary withdrawal (VW) is a way for students to leave a class without academic penalty once the Registration Revision Period has ended. If you opt to voluntarily withdraw from a course, you will not be eligible for a refund and, if applicable, will still be required to pay any outstanding tuition fees for the course. On your transcript, the course you have withdrawn from will be listed; however, "VW" will appear in lieu of a grade. If you do not drop a course before the VW deadline, you will receive a final grade in the course on your transcript.

Please note that there are separate deadlines for dropping a course early in a term during the Registration Revision Period. Dropping a course means you are removing that course from your schedule, will not be charged tuition fees for that course, and the course will not appear on your transcript.

The Registrar's Office website, Withdraw from a Course

(https://umanitoba.ca/registrar/withdraw-course), includes more information on the different ways in which you can withdraw from a course and important dates and deadlines to do so.

UM Learner Supports

Below you will find a select list of important supports for learners at the UM, both academic supports and otherwise. For a complete listing of all learner supports at the University of Manitoba, visit the Everything You Need to Thrive (https://umanitoba.ca/student-supports) website.

2SLGBTQIA+ Community

Find your queer community on campus! UM is committed to being an inclusive and welcoming space for all 2SLGBTQ+ students, staff and faculty. Visit the <u>2SLGBTQ+ Community</u> (https://umanitoba.ca/2slgbtq-community) website to access services, find resources, and connect with like-minded people and allies.

Academic Advising

Contact an <u>Academic Advisor</u> (https://umanitoba.ca/student-supports/academic-supports/academic-advising) for support with degree planning and questions about your academic program and regulations.

Academic Learning Centre (ALC)

The <u>Academic Learning Centre</u> (https://umanitoba.ca/student-supports/academic-supports/academic-learning) offers one-to-one tutoring, groups study sessions and workshops, as well as video and tip-sheet resources to help you throughout your academic program. All Academic Learning Centre programing, supports, and services are free for UM students.

Make an appointment for <u>free one-to-one tutoring</u> (https://umanitoba.ca/student-supports/academic-supports/academic-learning/tutoring-group-study#individual-tutoring). **Content tutors** (over 90 UM courses) can help you understand concepts and learn problem-solving strategies. **Study skills tutors** can help you improve your skills such as time management

and goal setting, reading and note-taking, as well as learning and test-taking strategies. **Writing tutors** can give you feedback on your academic writing, whether you are just getting started on a written assignment or already have a draft. **English as an Additional Language** specialist, Antoanela Denchuk, is available for one-to-one tutoring to help you improve your Englishlanguage academic writing skills. Use the drop-down menu, read the tutor biographies, and make an appointment for tutoring on the <u>Academic Learning Centre schedule</u> (https://manitoba.mywconline.com/).

Attend <u>Supplemental Instruction (SI)</u> (https://umanitoba.ca/student-supports/academic-supports/academic-learning/tutoring-group-study) sessions in historically difficult courses (including Chemistry, Engineering, and Computer Science). These free weekly review sessions are facilitated by a peer mentor who has previously taken the course and provide an opportunity to discuss course content, ask questions, compare notes, solve practice problems, and develop study strategies. See online for a list of SI courses and meeting times.

Register for an <u>Academic Success Workshop</u> (https://umanitoba.ca/student-supports/academic-supports/academic-learning/academic-success-workshops), where you can learn strategies to improve your writing and studying. More information on topics, dates, and registration, are found online.

Access the Academic Learning Centre's collection of <u>videos and tip sheets</u> (https://umanitoba.ca/student-supports/academic-supports/academic-learning#tip-sheets-forwriting-and-study-skills) to help you with many of the academic tasks you'll encounter in university.

Contact the Academic Learning Centre by calling 204-480-1481 or emailing academic_learning@umanitoba.ca. Bannatyne students can contact the Bannatyne Student Services office at 204-272-3190.

Basic Needs

It can be difficult to learn and succeed in courses when you are struggling to meet your or your family's basic needs. Several UM and community resources are listed below if you would benefit from support with regards to housing, food, finances, and/or childcare:

- Housing
 - UM Housing (https://umanitoba.ca/housing)
 - Winnipeg Rental Network (https://www.winnipegrentnet.ca/)
 - Manitoba Residential Tenancies Branch (https://www.gov.mb.ca/cca/rtb/)
 - HOPE End Homelessness Winnipeg Services & Supports (https://umanitoba.ca/housing)
- Food
 - U of M Food Bank (https://umanitoba.ca/financial-aid-and-awards/u-m-food-bank)
 - <u>Food Matters Manitoba</u> (https://foodmattersmanitoba.ca/find-emergency-food-in-winnipeg/)
- Finances
 - UM Financial Aid and Awards (https://umanitoba.ca/financial-aid-and-awards)

- Manitoba Student Aid (https://www.edu.gov.mb.ca/msa/)
- Child Care
 - <u>UM Child Care</u> (https://umanitoba.ca/about-um/child-care)
 - Manitoba Child Care Subsidy (https://bit.ly/3yG3ijy)
 - Manitoba Child Care Association (https://mccahouse.org/looking-for-child-care/)

English Language Centre

The <u>English Language Centre (ELC)</u> (https://umanitoba.ca/english-language-centre) provides courses, tests, accommodations and individual support to students whose first language is not English in order to support academic success and participation in the University of Manitoba community.

Health and Wellness

Physical, mental, emotional, and spiritual health and wellness play a critical role in student success. See all of UM's resource on their <u>Health and Wellness</u> (https://umanitoba.ca/student-supports/student-health-and-wellness) website, and make note of several specific UM and community supports listed below.

Winnipeg Urgent Physical and Mental Health Care

If you are an adult experiencing a mental health or psychosocial crisis, contact the <u>Klinic</u> <u>Community Health</u> (https://klinic.mb.ca/crisis-support/) 24/7 crisis line at 204-786-8686, visit the <u>Crisis Response Centre</u> (https://sharedhealthmb.ca/services/mental-health/crisis-response-centre/) located at 817 Bannatyne Avenue, or contact the Mobile Crisis Service at 204-940-1781.

To speak with a nurse for guidance on what health-care path to take for the issue you are facing or for general information about health resources available in Manitoba, contact <u>Health Links</u> (https://misericordia.mb.ca/programs/phcc/health-links-info-sante/) at 1-888-315-9257 (toll free).

If you need urgent medical care, visit the Winnipeg Regional Health Authority's Emergency
Department & Urgent Care Wait Times webpage (https://wrha.mb.ca/wait-times/) for a list of locations and current wait times.

Student Counselling Centre (SCC)

The <u>Student Counselling Centre</u> (https://umanitoba.ca/student-supports/student-health-and-wellness/student-counselling-centre-scc) provides free counselling and mental health support to UM, English Language Centre, and International College of Manitoba (ICM) students. We are open year-round, Monday through Friday from 8:30 am to 4:30 pm. Our commitment is to offer a support service to every student who contacts us.

Visit the SCC's <u>For Urgent Help</u> (https://umanitoba.ca/student-supports/student-health-and-wellness/student-counselling-centre-scc#for-urgent-help) webpage or the urgent care resources listed above if you require immediate support.

Visit the SCC's <u>Our Services</u> (https://umanitoba.ca/student-supports/student-health-and-wellness/student-counselling-centre-scc#for-urgent-help) webpage for more information on accessing a variety of services including individual counselling, counselling workshops and groups, support resources, and learning disability assessment services.

The SCC is located is located at 474 UMSU University Centre (Fort Garry Campus).

Health and Wellness Office

Students often juggle multiple demands, and we recognize that it can be difficult to find balance. For any changes you want to make to your health and wellness, the Health and Wellness Office at the University of Manitoba would like to support you in your journey. We are here to help you take control of your own health and make your own decisions. We are a judgment-free space and we avoid labels whenever possible. For more information, please visit the Health and Wellness Office (https://umanitoba.ca/student-supports/health-wellness) website.

Spiritual Care and Multifaith Centre

Spiritual care services are available to all, whether you identify as spiritual, atheist, religious or agnostic. Spiritual Services (https://umanitoba.ca/student-supports/spiritual-services) also offer specific denominational support for certain religious groups and by Indigenous Elders-in-Residence.

Student Support Case Management (SSCM)

Contact the <u>Student Support Case Management team</u> (https://umanitoba.ca/student-supports/academic-supports/student-advocacy/case-management) if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team.

University Health Service (UHS)

The <u>University Health Service</u> (https://umanitoba.ca/student-supports/health-wellness/university-health-service) offers a full range of medical services to students, including psychiatric consultation, via two health clinics:

- Fort Garry Campus: (204) 474-8411, ACW-Lot temporary trailer (behind the Isbister building)
- Bannatyne Campus: (204) 474-8411, P309 Pathology Building

Student Services at Bannatyne Campus

Student Services at Bannatyne Campus (SSBC) offers a full range of mental health supports to students and residents in the Rady Faculty of Health Sciences, along with other academic and personal supports. Visit the SSBC website (https://umanitoba.ca/student-supports/student-services-bannatyne-campus) for a list of services available.

Indigenous Students

Staff, faculty and Elders are well-equipped to ensure your university experience is as beneficial, accessible, and successful as possible. Visit the Indigenous Student Experience (https://umanitoba.ca/indigenous/student-experience) website for more information on the supports and services available.

International Students

The transition to a new country and a new academic system can be both exciting and overwhelming. The International Centre (IC) is here to help you settle into life at University of Manitoba. Visit the International Students website (https://umanitoba.ca/current-students/international) for more information.

Sexual Violence Support and Education

Sexual violence affects people of all ages, sexual orientations, genders, gender identities, abilities and relationship statuses. At the U of M, we are committed to ensuring a respectful work and learning environment for all. We want to build a safe and inclusive campus community where survivors of sexual violence know they can receive the supports they need to succeed, both academically and personally.

The <u>Sexual Violence Resource Centre</u> (https://umanitoba.ca/sexual-violence), located at 537 UMSU University Centre (Fort Garry campus) provides support, resources, information and referral services for any student, faculty or staff member who has been affected by sexual violence.

Student Accessibility Services (SAS)

The University of Manitoba is committed to providing an accessible academic community. Student Accessibility Services (https://umanitoba.ca/student-supports/accessibility) offers academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g., mental health, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation. SAS is located at 520 University Centre (Fort Garry Campus). Phone: (204) 474-7423. Email: Student accessibility@umanitoba.ca

Student Advocacy

<u>Student Advocacy</u> (https://umanitoba.ca/student-supports/academic-supports/student-advocacy) is a safe place for students. We help you navigate university processes and advocate for your rights as a student at UM. If anything in your personal or academic life is affecting your studies, contact our confidential intake assistant by phone (204-474-7423) or email (stady@umanitoba.ca).

University of Manitoba Libraries (UML)

As the primary contact for all research needs, your liaison librarian can play a key role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you have about the research process. Liaisons can be contacted by email or phone, and are also available to meet with you online or in-person. A complete list of liaison librarians can be found by subject (http://bit.ly/WcEbA1).

General library assistance is also available at both the Bannatyne and Fort Garry campuses by <u>visiting</u> <u>any library location</u> (https://www.umanitoba.ca/libraries/locations-and-facilities). When working online, students can receive help via the Ask Us chat button found on the right-hand side of the <u>Libraries' homepage</u> (http://www.umanitoba.ca/libraries).