

TRAILBLAZER ADVENTURER  
INNOVATOR DEFENDER CHALLENGER  
ADVENTURER TRAILBLAZER DEFENDER VISIONARY  
VISIONARY ADVENTURER TRAILBLAZER CHALLENGER DEFENDER VISIONARY

# Syllabus

AGRI 3500 – Geographical Information Systems (GIS)  
Applications in Agriculture  
(Fall 2022)



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## COURSE DETAILS

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<b>Course Title &amp; Number:</b>	AGRI 3500 – Geographical Information Systems (GIS) Applications in Agriculture
<b>Number of Credit Hours:</b>	3.0
<b>Class Times &amp; Days of Week:</b>	Thursday 2:30-5:15 pm
<b>Location for classes/labs/tutorials:</b>	137 Agriculture Building/Zoom Meetings
<b>Pre-Requisites:</b>	A minimum 60 credit hours of university level courses

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## Instructor Contact Information

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<b>Instructor(s) Name &amp; Preferred Form of Address:</b>	Marcos Cordeiro
<b>Office Location:</b>	232 Animal Science Building
<b>Office Hours or Availability:</b>	Generally, open door policy from 9:00 am to 4:00 pm but best to schedule an appointment by email
<b>Office Phone No.</b>	(204) 474-6112
<b>Email:</b>	<a href="mailto:Marcos.Cordeiro@umanitoba.ca">Marcos.Cordeiro@umanitoba.ca</a> All email communication must conform to the <a href="#">Communicating with Students</a> university policy.
<b>Contact:</b>	Students are encouraged to contact the instructor in person, by phone or email during the time outlined above.

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## Course Description

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Geographical information systems (GIS) applications are becoming widespread in modern agriculture. This course introduces students to fundamental concepts as well as recent developments in GIS pertaining to agriculture. Through lectures, assigned readings, group discussions, seminars and hands-on lab exercises, students will engage in spatial analyses that include mapping and summarizing soil, crop, livestock, and weather datasets. During these analyses, students will experience the complete GIS workflow by downloading and inputting data into GIS software, quality controlling and pre-processing datasets, using GIS analytical tools, and exporting spatial products such as digital maps. This course may use freely available software packages such as QGIS and the R programming language.

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## Course Goals

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Through discussing relevant material and working on hands-on GIS exercises, students will (1) work with typical data formats and software packages used in GIS analyses, (2) gain experience with major datasets used in agricultural applications and learn how to acquire them, and (3) analyze current issues in agriculture using GIS workflows.

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## Course Learning Objectives

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At the end of the course, students will be able to:

1. Contrast different data formats and software packages as tools to answer specific questions in agriculture using GIS;
2. Integrate several data sources that relate agricultural outputs to physiography and climate;
3. Develop analysis workflows in GIS based on questions to be answered, datasets available, and software capabilities;
4. Summarize the results of spatial analysis in meaningful graphs, maps, and statistics;
5. Assess the limitations of the analysis based on inherent characteristics of the datasets (e.g., spatial resolution).

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## Textbook, Readings, and Course Materials

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There are no required texts for the course. However, supplementary readings (e.g., journal articles) will be assigned according to the topic being addressed by the students. The following are a few examples of reading materials:

1. Snyder. 1987. Map projections: A working manual. Available from: <http://pubs.er.usgs.gov/publication/pp1395>
2. De Smith et al. 2020. Geospatial Analysis: A Comprehensive Guide to Principles, Techniques and Software Tools. 6th edition ed.: Matador. Available from: <https://www.spatialanalysisonline.com/HTML/index.html> \*\*\*This book is free of charge for reading online.
3. Global Strategy to improve Agricultural and Rural Statistics (GSARS). 2017. Handbook on Remote Sensing for Agricultural Statistics. GSARS Handbook: Rome. Available from: <http://www.fao.org/3/ca6394en/ca6394en.pdf>.
4. Fang et al. 2014. Spatial Thinking in Planning Practice: An Introduction to GIS. Portland State University Library, Portland, OR. Available from: <https://pdxscholar.library.pdx.edu/pdxopen/4/>.

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## Using Copyrighted Material

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Please respect copyright. For more information, see the University's Copyright Office website at <http://umanitoba.ca/copyright/> or contact [um\\_copyright@umanitoba.ca](mailto:um_copyright@umanitoba.ca).

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## Course Technology

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Different GIS packages (e.g., QGIS) and open-source programming language software (e.g., R and R Studio) may be used in this course. Students should have administrative rights in the computers they will be using during the lectures in order to install different software packages.

Presential lectures will take place primarily in computer lab. Occasionally, lectures will take place online through Zoom meetings if the computer lab is not available. Student should refrain from behaviour that is distracting to other students.

### **Expectations: I Expect You To**

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- a) Attend class on time so we start on time;
- b) Ask for help when you need assistance;
- c) Submit your own work for individual assignments and to work together in a team for group assigned projects;
- d) To act in a civil, respectful, and responsible manner toward all members of the U of M community. See [Respectful Work and Learning Environment Policy](#).

#### **Class Communication:**

Students are required to obtain and use your University of Manitoba email account for all communication between yourself and the university. 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](http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html);

#### **Academic Integrity:**

Each student in this course is expected to abide by the University of Manitoba Academic Integrity principles (please see UM Policies section below). Always remember to reference the work of others that you have used. Also be advised that you are required to complete your assignments independently unless otherwise specified. If you are encouraged to work in a team, ensure that your project complies with the academic integrity regulations. You must do your own work during exams. Inappropriate collaborative behavior and violation of other Academic Integrity principles, will lead to the serious [disciplinary action](#). Visit the [Academic Calendar](#), [Student Advocacy](#), and [Academic Integrity](#) web pages for more information and support.

Refer to specific course requirements for academic integrity for individual 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 should be completed independently unless otherwise specified.

#### **Recording Class Lectures:**

Cordeiro and the University of Manitoba hold copyright over the course materials, presentations and lectures which form part of this course. No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without permission. Course materials (both paper and digital) are for the participant's private study and research.

#### **Student Accessibility Services:**

The University of Manitoba is committed to providing an accessible academic community. Please see UM Learner Supports section below.

### Expectations: You Can Expect Me To

- a) To be available prior to and after the class time to discuss any questions or comments you may have;
- b) To provide feedback on assignments and exams.

### CLASS SCHEDULE AND COURSE EVALUATION

The course assessment consists of 10 weekly assignments and a final presentation at the end of the term. Students will be graded according to the following:

Assessment*	Fraction of the final grade
Weekly assignments	70%
Term project	30%

\* Late penalty: 25% for each 24 h period unless otherwise noted.

This schedule is subject to change at the discretion of the instructor and/or based on the learning needs of the students but such changes are subject to [Section 2.8 of ROASS](#).

Item	Class Content	Assessment	Due Date	Value of Final Grade
Sep. 8	<b>Lec. 01:</b> Course outline and schedules. Introduction to GIS			
Sep. 15	<b>Lec. 02:</b> Geographic representation Georeferencing	Assignment 01		
Sep. 22	<b>Lec. 03:</b> Geographic data formats/sources/metadata	Assignment 02	Assignment 01	5%
Sep. 29	<b>Lec. 04:</b> Key boundary units in agriculture Key GIS operations	Assignment 03	Assignment 02	5%
Oct. 6	<b>Lec. 05:</b> Map design: key elements, insets, legends, graticule	Assignment 04	Assignment 03	5%
Oct. 13	<b>Lec. 06:</b> Ag datasets: soils (NSDB products)	Assignment 05	Assignment 04	5%
Oct. 20	<b>Lec. 07:</b> Ag datasets: topography (USGS/MLI datasets)	Assignment 06	Assignment 05	5%
Oct. 27	<b>Lec. 08:</b> Ag datasets: land use (Annual Crop Inventory)	Assignment 07	Assignment 06	10%
Nov. 3 Zoom	<b>Lec. 09:</b> Ag datasets: livestock (Census of Agriculture)	Assignment 08	Assignment 07	5%
Nov. 10	<b>No class: Fall break</b>			
Nov. 17	<b>Lec. 10:</b> Spatial analysis: First nations reserves	Assignment 09	Assignment 08	10%
Nov. 24	<b>Lec. 11:</b> Spatial analysis: weather	Assignment 10	Assignment 09	10%
Dec. 1	<b>Lec. 12:</b> Spatial analysis: water		Assignment 10	10%
Dec. 8	<b>Term assignment</b>			30%
				<b>100%</b>

**Covid contingency plans**

The Faculty of Agricultural and Food Sciences has devised a plan so that there is minimal impact on the delivery and content of the course, should the instructor fall sick and is unable to continue lectures in-person. Please be assured that the alternative plan outlining any deviation from the normal mode of instruction will be communicated to you as quickly as possible if/when the need arises.

## Grading

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Letter Grade	Percentage out of 100	Final Grade Point
A+	92-100	4.5
A	80-91	4.0
B+	75-79	3.5
B	70-74	3.0
C+	65-69	2.5
C	60-64	2.0
D	50-59	1.0
F	Less than 50	0

## Important Dates

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September 20	Last day to drop classes without penalty
September 21	Last day to register for term and spanned courses
October 5	Tuition deadline
November 22	Voluntary withdrawal (VW) deadline
December 12	Last day of classes
December 19-23	Winter term final exam period

## Referencing Style

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Assignments should use the APA reference style as outlined in the text: American Psychological Association. (2009). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author.

## Assignment Feedback

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Feedback on assignments, outlines, drafts, and analysis will be within a reasonable amount of time following submission.

## Assignment Extension and Late Submission Policy

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Extensions will be granted in special cases under instructor discretion.

## UNIVERSITY POLICIES & SUPPORT OFFICES

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### UM Policies

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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 [Governing Documents](https://umanitoba.ca/governance/governing-documents) (<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 [Academic Calendar](https://umanitoba.ca/registrar/academic-calendar) (<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 [Academic Calendar](https://umanitoba.ca/registrar/academic-calendar) (<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:

- [Academic Integrity](https://umanitoba.ca/student-supports/academic-supports/academic-integrity) (<https://umanitoba.ca/student-supports/academic-supports/academic-integrity>)
  - [Student Resources](https://umanitoba.ca/student-supports/academic-supports/academic-integrity#resources-to-conduct-academic-work-with-integrity) (<https://umanitoba.ca/student-supports/academic-supports/academic-integrity#resources-to-conduct-academic-work-with-integrity>)
  - [Academic Misconduct and How to Avoid It](https://umanitoba.ca/student-supports/academic-supports/academic-integrity#academic-misconduct-and-how-to-avoid-it) (<https://umanitoba.ca/student-supports/academic-supports/academic-integrity#academic-misconduct-and-how-to-avoid-it>)
- [Student Advocacy Office](https://umanitoba.ca/student-supports/academic-supports/student-advocacy) (<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/) (<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) (<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) (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 [faculty/college/school](https://umanitoba.ca/academics) 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) (https://umanitoba.ca/about-um/respectful-work-and-learning-environment-policy)
- [Student Discipline](https://umanitoba.ca/governance/governing-documents-students#student-discipline) (https://umanitoba.ca/governance/governing-documents-students#student-discipline)
- [Violent or Threatening Behaviour](https://umanitoba.ca/governance/governing-documents-students#violent-or-threatening-behaviour) (https://umanitoba.ca/governance/governing-documents-students#violent-or-threatening-behaviour)

The UM website, [Engaging in Respectful Conduct](https://umanitoba.ca/student-supports/respectful-conduct) (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 [Sexual Violence Resource Centre's information page](https://umanitoba.ca/student-supports/sexual-violence-support-and-education/sexual-violence-get-informed) (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) (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

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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 [Student Supports website](https://umanitoba.ca/student-supports) (<https://umanitoba.ca/student-supports>).

### Academic Advising

Contact an [Academic Advisor](https://umanitoba.ca/student-supports/academic-supports/academic-advising) (<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 [Academic Learning Centre](https://umanitoba.ca/student-supports/academic-supports/academic-learning) (<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 programming, supports, and services are free for UM students.

Make an appointment for [free one-to-one tutoring](https://umanitoba.ca/student-supports/academic-supports/academic-learning/tutoring-group-study#individual-tutoring) (<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 English-language academic writing skills. Use the drop-down menu, read the tutor biographies, and make an appointment for tutoring on the [Academic Learning Centre schedule](https://manitoba.mywconline.com/) (<https://manitoba.mywconline.com/>).

Attend [Supplemental Instruction \(SI\)](https://umanitoba.ca/student-supports/academic-supports/academic-learning/tutoring-group-study) (<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 [Academic Success Workshop](https://umanitoba.ca/student-supports/academic-supports/academic-learning/academic-success-workshops) (<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.

Register for [Faculty of Graduate Studies Grad Steps Workshops](https://umanitoba.ca/graduate-studies/student-experience/graduate-student-workshops) (<https://umanitoba.ca/graduate-studies/student-experience/graduate-student-workshops>). These workshops are specifically designed for students working towards **Master's degrees or PhDs**. More information on topics, dates, and registration can be found online.

Access the Academic Learning Centre's collection of [videos and tip sheets](https://umanitoba.ca/student-supports/academic-supports/academic-learning#tip-sheets-for-writing-and-study-skills) (<https://umanitoba.ca/student-supports/academic-supports/academic-learning#tip-sheets-for-writing-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](mailto: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) (https://umanitoba.ca/housing)
  - [Winnipeg Rental Network](https://www.winnipegrentnet.ca/) (https://www.winnipegrentnet.ca/)
  - [Manitoba Residential Tenancies Branch](https://www.gov.mb.ca/cca/rtb/) (https://www.gov.mb.ca/cca/rtb/)
  - [HOPE End Homelessness Winnipeg Services & Supports](https://umanitoba.ca/housing) (https://umanitoba.ca/housing)
- *Food*
  - [U of M Food Bank](https://umanitoba.ca/financial-aid-and-awards/u-m-food-bank) (https://umanitoba.ca/financial-aid-and-awards/u-m-food-bank)
  - [Food Matters Manitoba](https://foodmattersmanitoba.ca/find-emergency-food-in-winnipeg/) (https://foodmattersmanitoba.ca/find-emergency-food-in-winnipeg/)
- *Finances*
  - [UM Financial Aid and Awards](https://umanitoba.ca/financial-aid-and-awards) (https://umanitoba.ca/financial-aid-and-awards)
  - [Manitoba Student Aid](https://www.edu.gov.mb.ca/msa/) (https://www.edu.gov.mb.ca/msa/)
- *Child Care*
  - [UM Child Care](https://umanitoba.ca/about-um/child-care) (https://umanitoba.ca/about-um/child-care)
  - [Manitoba Child Care Subsidy](https://bit.ly/3yG3ijy) (https://bit.ly/3yG3ijy)
  - [Manitoba Child Care Association](https://mccahouse.org/looking-for-child-care/) (https://mccahouse.org/looking-for-child-care/)

## English Language Centre

The [English Language Centre \(ELC\)](https://umanitoba.ca/english-language-centre) (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 [Health and Wellness](https://umanitoba.ca/student-supports/student-health-and-wellness) (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 [Klinik Community Health](https://klinik.mb.ca/crisis-support/) (https://klinik.mb.ca/crisis-support/) 24/7 crisis line at 204-786-8686, visit the [Crisis Response Centre](https://sharedhealthmb.ca/services/mental-health/crisis-response-centre/) (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 [Health Links](https://misericordia.mb.ca/programs/phcc/health-links-info-sante/) (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](https://wrha.mb.ca/wait-times/) webpage (https://wrha.mb.ca/wait-times/) for a list of locations and current wait times.

### Student Counselling Centre (SCC)

The [Student Counselling Centre](https://umanitoba.ca/student-supports/student-health-and-wellness/student-counselling-centre-scc) (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 [For Urgent Help](https://umanitoba.ca/student-supports/student-health-and-wellness/student-counselling-centre-scc#for-urgent-help) (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 [Our Services](https://umanitoba.ca/student-supports/student-health-and-wellness/student-counselling-centre-scc#for-urgent-help) (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 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) (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) (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 [Student Support Case Management team](https://umanitoba.ca/student-supports/academic-supports/student-advocacy/case-management) (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 [University Health Service](https://umanitoba.ca/student-supports/health-wellness/university-health-service) (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) (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) (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](https://umanitoba.ca/current-students/international) 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 [Sexual Violence Resource Centre](https://umanitoba.ca/sexual-violence) (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) (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).

### **Student Advocacy**

[Student Advocacy](https://umanitoba.ca/student-supports/academic-supports/student-advocacy) (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 ([stadv@umanitoba.ca](mailto:stadv@umanitoba.ca)).

### **University of Manitoba Libraries (UML)**

As the primary contact for all research needs, your liaison librarian can play a vital 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 may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A [complete list of liaison librarians](http://bit.ly/WcEbA1) (http://bit.ly/WcEbA1) can be found by subject.

In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the [UM Libraries and Departments](https://libguides.lib.umanitoba.ca/c.php?g=298526) (https://libguides.lib.umanitoba.ca/c.php?g=298526) webpage. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the [University of Manitoba Libraries' homepage](https://umanitoba.ca/libraries/) (https://umanitoba.ca/libraries/).