STAT 7250: Advanced Topics in Statistics 2, Winter 2024 (T01), CRN: 64047

Tentative Course Outline

Course Details

Course Title & Number:	Statistical Learning-Cross listed with STAT4250
Credit Hours:	3
Class Schedule:	11:30 AM–12:20 PM, MWF
Location for Lectures:	315 Machray Hall
Course Material:	All course materials will be posted on UMLearn website
Important Note:	NOT TO BE TAKEN WITH STAT4250.
Course Description:	(Lab required) Topics related to the use of Statistics and inferential methods in machine learning, including the lasso and ridge regression, classification and clustering, neural networks, support vector machines, bagging, boosting and ensemble methods.

Instructor Contact Information

Instructor:	Mohammad Jafari Jozani
Office:	365 Machray Hall
Office Hours & Availability:	Wednesdays from 2:30 pm to 3:45 pm. Feel free to ask me questions before, during and after the lectures in the classroom. If office hours are not convenient for you, please email me to arrange an alternate time to meet.
E-mail:	m_jafari_jozani@umanitoba.ca
	I will only respond to e-mail from UMNet ID's. When feasible, I normally return a call or an email within 24 hours.
Web Pages:	My personal website: https://www.complex-data-analytics.com/
	UM Learn: http://umanitoba.ca/umlearn
	Statistics: https://www.sci.umanitoba.ca/statistics

Tutorials and Lab

Lab Instructor:	Neve Loewen
E-mail:	loewenn9@myumanitoba.ca
Office:	347 Machray Hall
Office Hours & Availability:	Wednesdays 10:00–11:00 or by appointment.

Lab Time:	Mondays from 2:30 pm to 3:45 pm.
Lab Location:	Science Lab

Attendance of lab tutorials is mandatory. During the tutorials, some selected theoretical and applied problems will be solved and solutions to some real data analysis using R will be provided. You can ask questions related to course content during the lab tutorials as well. The first few Labs are dedicated to teaching the basics of R, RStudio and R-markdown. Tutorials are designed to provide you with various practical hands-on computing experience on theory and applications.

General Course Information and Course Registration

In this course, you will learn some selected topics in statistical learning as we cover major techniques and concepts pertinent to both supervised and unsupervised learning. You will learn how and when to apply statistical learning techniques, their comparative strengths and weaknesses, and how to critically evaluate the performance of learning algorithms. The goal is to

(i) properly apply statistical learning methods and perform exploratory analysis,

(ii) properly select statistical learning models,

(iii) implement these methods using suitable programming languages such as R and/or Python,

(iv) correctly assess model fit and error, build an ensemble of learning algorithms.

Course Registration

It is **your responsibility** to ensure that you are entitled to be registered in this course. This means that you:

1. have the appropriate prerequisites, as noted in the calendar description, or have an appropriate permission from the instructor to waive these prerequisites;

2. have not previously taken, or are concurrently registered in, this course and another that has been identified as "not to be held with" in the course description.

The registration system may have allowed you to register in this course, but it is **your responsibility to check**. If you are not entitled to be in this course, you will be withdrawn, or the course may not be used in your degree program. There will be no fee adjustment. This is not appealable. Please be sure to read the course description for this and every course for which you are registered.

Textbook, Readings, Materials

I will be having my own course notes. However, the main textbooks for this course are listed below. Other references will be suggested during the course if required. You can download these references as I describe below. Lecture notes will be available through the UMLearn system.

1. *An Introduction to Statistical Learning with Applications in R (2nd Edition)*. Gareth James, Daniela Witten, Trevor Hastie and Robert Tibshirani. Springer Texts in Statistics. NewYork (2021).

   E-book is available for download here https://hastie.su.domains/ISLR2/ISLRv2_website.pdf.
2. *The Elements of Statistical Learning (2nd Edition)*. Trevor Hastie, Robert Tibshiani and Jerome Friedman. Springer Series in Statistics. (2009).

   E-book is available for download using https://web.stanford.edu/ hastie/Papers/ESLII.pdf.
3. *Applied Predictive Modeling*. Max Kuhn and Kjell Johnson. Springer, New York. (2013).

   E-book is available through the UofM Library.
4. *Computer Age Statistical Inference: Algorithms, evidence, and data science*. Bradley Efron and Trevor Hastie. Cambridge University Press. (2009).

   E-book is available for download using https://hastie.su.domains/CASI_files/PDF/casi.pdf.

In order to prepare for class, please read selected topics (mainly from the first textbook above) before coming to each lecture session. I am not expecting you to learn the material on your own, only to familiarize yourself with the main ideas and vocabulary so that the lectures are easier to follow. Do not get bogged down in formulae or minute details. If you come across something that is confusing or troubling, don't despair. If your questions are not resolved during the lecture, please ask. As you work on the problem sets, it will be helpful to re-read the material on a more detailed level.

Topics To Be Covered

Here is the outline of the course material (not necessarily in the same order that I will be teaching in the class), which is subject to change, depending on time and class interests.

1. Introduction
- A brief overview of statistical learning concepts
- Introducing methods for assessing the model accuracy
- A brief introduction to R programming (in the Lab)

2. Unsupervised Learning
- Clustering methods such as K-means clustering, density based clustering, hierarchical clustering, etc.
- Understanding dendrograms and different similarity and dissimilarity measures.

3. Supervised Learning
- Regression analysis, K-nearest neighbours methods, and related topics.
- Support Vector Machines
- Resampling Techniques such as the Cross-Validation and Bootstrap.
- Classification using the logistic regression, LDA, QDA, and Naive Bayes approaches.
- Tree-based methods, Bagging and Boosting

4. Other Selected Concepts
- Degree of freedom and related topics
- Curse of dimensionality
- Matrix completion (if time permits)
- Introduction to Deep Learning (if time permits)

Course Technology and genAI

Course web-page: Course materials will be made available through the University of Manitoba's UM Learn system (`umanitoba.ca/d2l`).

Software: In this course, I will extensively be making use of the R statistical software and RStudio. I might also use Python if needed. R is a free software environment for statistical computing and runs on Windows, Linux, UNIX and Mac. You can download your own copy from R Project (CRAN) homepage at `http://www.r-project.org/`. RStudio can be downloaded from `https://www.rstudio.com/`. Please download and install. A sample R-studio document will be posted on course website.

You can have access to Python and R through syzygy at `https://intro.syzygy.ca/` which gives you direct interactive computing environment to R and Python with Jupyter notebooks at a single access point. You can log into the syzygy service using your UoM account credentials at `https://umanitoba.syzygy.ca/`.
Please download and install.

Other Technology: It is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical and legal manner. Students should restrict their use of technology to those approved by the instructor and/or University of Manitoba Accessibility Services for *educational purposes only*. Electronic messaging, e-mail, social networking, gaming, etc. should be avoided during class time. Cell phones should be turned off. If a student is on call for emergencies, his/her cell phone should be on vibrate mode and the student should leave the classroom before using it.

genAI: Students are encouraged to make use of technology, including generative artificial intelligence (genAI) tools to contribute to their understanding of course materials. However, the use of genAI or apps for assignments in this course, including tools like ChatGPT and other AI coding assistants, is prohibited. Students may use such tools for creating an outline for their course project, but the final submitted project must be original work produced by the individual student alone. Any content produced by an artificial intelligence tool must be cited appropriately.

Important Dates

These dates are tentative and 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 the ROASS Procedure.

Date	Information	Date	Information
January 8	Classes Begin	March 20	Last Day for VW
February 19	Louis Riel Day	March 29	Good Friday
February 19–23	Winter Term Break	April 12	**Project Report Deadline**
February 26	**Project Proposal Deadline**	April 10	End of Classes
March 4	**Midterm Test**	April 12 – 26	Final Exams Period

Midterm and Final Exams

You will be having ONE midterm test worth 15% of your final grade and a final exam. The tentative date for your term test is **March 4, 2024** from 2:30 pm to 3:45 pm. Test content is defined by the lecture notes. **There will be no make-up test.** If you miss the term test with a valid reason and inform me within 24 hours, the weight of the test will be shifted to the final exam. The final exam covers all course materials and will be 3 hours. The final exam will be worth 25% of your final mark. It will be scheduled by the department. Non-programmable calculators are allowed in the midterm and final. No other electronic devices can be in your possession during the midterm and final exam.

Assignments

Assignments worth 10% of your final grade (There will be 5 assignments each worth 2%). Your Lab instructor will be giving you more information about the due dates, etc. All assignments must be submitted electronically by their due date using UM Learn Dropbox. Make sure to follow the assignment submission guideline and note that late assignments will not be accepted.Obviously, exceptions can be made to the above policy if special/exceptional circumstances warrant them (e.g., serious illness). Students are encouraged to discuss and work together on the solutions to the assignments. However, each student must hand in his or her own copy of each assignment with personalized solutions, including comments, discussions and interpretations. Note that actions will be taken against students who are found guilty of acts of academic dishonesty. Your assignments should conform to the following standards:

- Theoretical part of the assignments are to be done on 8.5×11 paper, scanned and submitted as a high quality PDF file.
- *Name the file you submit with your name and student ID.*
- Applied and simulation parts of each assignment that involve R programming should be accompanied with the R codes and results should be reproducible. I do encourage you to use R-markdown to hand in your R assignments.
- Revise your assignments so they are reasonably free of grammatical and typographical errors.
- Make sure each step in your solutions is well justified: the marker will mark what is written on paper and should not have to guess what you mean.
- Messy or unreadable assignments will be returned with a mark of zero.
- **At the front page of your assignment file, you need to declare that you have not used AI and ChatGPT for your assignments.**

Independent Study and Presentation Project

In this project, which will worth 10% of your final mark, you will have the opportunity to explore a specific topic from your main textbook, conduct in-depth research, and present your findings to the class. The project involves studying theoretical concepts, implementing methods using R, and showcasing your understanding through a short presentation.

- Choose a topic from your main textbook that is not covered in the class.
- Provide and deliver a short presentation (maximum 20 minutes) to introduce and explain the chosen topic.
- Clearly articulate the idea behind the selected method, theoretical foundations, and practical implementation.
- Demonstrate the practical application of the chosen method using the R programming language.
- Implement the method on a real-world dataset of your choice.
- Submit a detailed report in Rmarkdown format, covering the following:
  - Introduction to the chosen topic.
  - Theoretical background and key concepts.
  - Details of the R implementation, including code snippets.
  - Results and insights gained from applying the method to the chosen dataset.

Presentations will be assessed based on the following criteria:

- **Depth of Understanding:** How well you comprehend and explain the theoretical concepts.
- **Technical Proficiency:** Demonstrated ability to implement the method using R.
- **Clarity of Presentation:** The effectiveness of your communication during the presentation.
- **Insights and Analysis:** The quality of insights gained from applying the method to a real-world dataset.
- **Report Structure and Formatting:** The organization and clarity of your Markdown report.

Course Project

There will be a course project worth 40% of your final grade. This is a very important component of the course and here you should make your hands dirty by solving a real world problem using the methods you learn in this course. Choose a recent data

set (no later than 2020) that has already being used in the literature. The write up for this milestone should tell us what you are planning to do for the project. Your write up should include the project title and it should include:

1- A good introduction and an overview of the background material.

2- A description of why the problem you chose is interesting, important and challenging.

3- A clear statement of what you wish to accomplish by the end of the project and what type of statistical learning models you will be developing. Write about your training and testing process.

The proposal should be limited to 2 pages, excluding references. Students should use the data sets from published papers in reputable journals (no later than 2020). These data sets can often be found in famous data repositories (e.g., Kaggle website, etc.). More references will be provided in the course. However, you are strongly encouraged to confirm it with me before starting any significant analysis of your selected data set. **A proposal should be submitted to me by February 26, 2024**. After your plan is approved by myself (with or without revision) then you can start working on your project and completing the analysis while we are going through the course materials. Final reports (at most 20 pages including all graphs, tables, and references) should be prepared in Rmarkdown and in the PDF format. **The due date for submitting your final report is April 12, 2024**. More details regarding the data project will be submitted on UMLearn.

Your report should conform to the following standards:

- Be sure that you explain as clearly as possible the algorithms you used in your project.
- Your report should have a motivation and a quick summary of the problem. Avoid triviality and aim for complexity and meaningful challenges
- Real data analysis should be chosen wisely. Don't just pair known tools with known problems.
- Showcase your ability to innovate and advance knowledge.
- Your report should be accompanied with the R codes and I should be able to get your answers by running your codes. If your R code does not work you will not get any mark. You are highly encouraged to use Rmarkdown to prepare final report.
  - Provide clean and readable code
  - Provide necessary comments and include all training parameters
  - Seed set in code
- Revise your report so they are reasonably free of grammatical and typographical errors. Messy or unreadable project report will be returned with a mark of zero.
- Each report should have a conclusion section that includes comments on the meaning of the results and open questions. Specify the contribution of each team member.

Grading Scheme

The following are the minimum percentage grades required to receive each of the various letter grades: A+ (90%), A (80%), B+ (75%), B (70%), C+ (65%), C (60%), D (50%).

Item	Percent
Midterm Test	15%
Assignments	10%
Independent Study and Project Presentation	10%
Final Exam	25%
Course Project	40%
Total	100%

Class Communications

The University requires all students to activate an official U of M email account, which should be used for all communications between yourself and the university (including all your instructors). All these email communications should comply with the University's policy on electronic communication with students, which can be found at: `http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html`

Using Copyrighted Material

Please respect copyright and we will use copyrighted content in this course. All course notes, assignments, tests, exams, practice exams and solutions are the intellectual property of your instructor or the Department of Statistics. Reproduction or distribution

of these materials is strictly forbidden without their consent. For more information, see the University's Copyright Office website at http://umanitoba.ca/copyright/orcontactum_copyright@ umanitoba.ca.

Recording Class Lectures

Mohammad Jafari Jozani 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 of Mohammad Jafari Jozani**. Course materials (both paper and digital) are for the participant private study and research. If class recordings are provided by the instructor those are meant to be for your own personal use only. **It is not permitted to copy or distribute any course material and recordings, etc.**

Respectful Behaviour and Use of Electronics in the Classroom

It is expected that you conduct yourself professionally and do not distract your fellow students with unnecessary or inappropriate chat messages, sounds, or images while in the classroom. It is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical and legal manner. A student may use technology in the classroom setting only for educational purposes approved by the instructor and/or the University of Manitoba Accessibility Services. Students should not engage in electronic messaging/posting activities (e-mail, texting, video or voice chat, social networking (e.g. Facebook) or electronic gaming during scheduled class time.

Student Accessibility Services

If you are a student with a disability, please contact Student Accessibility Services (SAS) for 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 illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services, http://umanitoba.ca/student/saa/accessibility/
520 University Centre, (204) 474-7423, Student_accessibility@umanitoba.ca

Academic Integrity

It is important that you understand what constitutes academic dishonesty and that you are familiar with the very serious consequences. Links to resources that describe academic dishonesty (including plagiarism, cheating, inappropriate collaboration and examination impersonation, as well as typical penalties) can be found at:

`http://umanitoba.ca/faculties/science/undergrad/resources/webdisciplinedocuments.html`
or
`http://umanitoba.ca/faculties/science/undergrad/resources/webdisciplinedocuments.html`

ROASS Schedule A

Schedule "A" of the *Responsibilities of Academic Staff with regards to Students (ROASS)* policies of the University of Manitoba lists resources and policies for students. It is important that you familiarize yourself with these resources and policies. This document will be posted to the Department of Statistics web page and to the UM Learn system.

`http://umanitoba.ca/science/statistics/files/pages/2016/09/Schedule-A-ROASS-Statistics.pdf`

Extra information

Please find some important information (Appendix for Course Syllabi) from the Faculty of Science in the following pages. In case, any link is missing, a separate pdf file is also posted in UM Learn. Some information may be repeated from the above.

Schedule A For Winter 2024 Course Syllabi

How To Succeed In Your Science Courses?

The Faculty of Science is committed to delivering the high-quality education our students have come to expect. We also want to ensure that you set yourself up for success. We want you to succeed!

#1. Registration Revision Period: Use the Registration Revision Period to evaluate course syllabus. During the registration revision period you will be able to drop/add courses without any financial consequence. Speak directly with instructors if you have any questions specific to their course.

#2. Evaluate Workload: Take time to consider the workload associated with the course schedule you are planning. Be realistic about other commitments and distractions that are part of everyday life and make your course selection decisions accordingly. Please consider watching this presentation from the Academic Learning Centre for Managing Your Time Effectively. If you want to discuss anything, talk to an Academic advisor in your faculty – Academic advising.

#3. Commitment to Study: For an average course, you should aim to commit at least three hours of studying for every hour of lecture. Make sure you keep up with studying on a consistent basis.

#4. Reach Out for Help: If you experience issues learning the course material, reach out to your instructor, teaching assistants, supplemental instruction leaders or Academic Learning Centre for the course as soon as possible. Most content builds on previous content and deficiencies in understanding will cascade issues throughout the course. For questions about your degree program or if life stresses hinder your academic performance, contact your faculty's academic advisors immediately.

#5. Learn Efficiently, Learn to Take Notes: During the pandemic, many lectures were delivered asynchronously so students had a chance to review lecture videos when they did not catch something during the lecture. Students in lectures delivered in-person will not have the luxury of rewatching a live lecture. Therefore, you may want to review some note-taking tips offered by the Academic Learning Centre which can help you learn efficiently.

University of Manitoba Policies

As a student at the University of Manitoba (UM) 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 UM website's 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 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.

Learner Support

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.

Academic Advising

Contact an Academic Advisor for support with degree planning and questions about your academic program and regulations.

Academic Learning Centre (ALC)

The Academic Learning Centre 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 **free one-to-one 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.

Attend **Supplemental Instruction (SI)** 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**, 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 **videos and tip sheets** 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.

University of Manitoba Libraries

Research begins at UM Libraries. Learn at the Libraries is a great place to start, with information for students on academic writing, how to search the library, evaluating resources, and writing citations. 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 locating appropriate resources

or managing citations, 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 online. When working remotely, students can also receive help online through Ask Us! chat. For further detail about the libraries' services and collections, visit the Libraries' web site.

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
  - Manitoba Residential Tenancies Branch
- *Food*
  - U of M Food Bank
  - Food Matters Manitoba
- *Finances*
  - UM Financial Aid and Awards
  - Manitoba Student Aid
- *Child Care*
  - UM Child Care
  - Manitoba Child Care Subsidy
  - Manitoba Child Care Association

English Language Centre

The English Language Centre (ELC) 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 UM community.

Health Support

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 website, and make note of several specific UM and community supports listed below.

Mental Health Support

Winnipeg Urgent Physical and Mental Health Care
If you are an adult experiencing a mental health or psychosocial crisis, contact the Klinic Community Health 24/7 crisis line at 204-786-8686, visit the 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 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 for a list of locations and current wait times.

Student Counselling Centre (SCC)

The Student Counselling Centre 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 webpage or the urgent care resources listed above if you require immediate support.

Visit the SCC's Our Services 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 UM 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 website.
Health and Wellness Educator https://umanitoba.ca/student/health-wellness/welcome-about.html
britt.harvey@umanitoba.ca
469 University Centre, Fort Garry Campus
(204) 295-9032

Spiritual Care and Multifaith Centre

Spiritual care services are available to all, whether you identify as spiritual, atheist, religious or agnostic. 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 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.
Student Support Intake Assistant http://umanitoba.ca/student/case-manager/index.html
520 University Centre, Fort Garry Campus
(204) 474-7423

University Health Service (UHS)

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation.
University Health Service http://umanitoba.ca/student/health/
104 University Centre, Fort Garry Campus
(204) 474-8411 (Business hours or after hours/urgent calls)

Health And Safety

The UM is committed to maintaining a safe learning environment for all students, faculty, and staff. For information related to COVID-19 for our campus community, please visit the page: https://umanitoba.ca/coronavirus

Please stay home when you are feeling unwell.

Sexual Violence Support and Education

Sexual violence affects people of all ages, sexual orientations, genders, gender identities, abilities and relationship statuses. At the UM, 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, 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.

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 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 UM. Visit the International Students website for more information.

Academic Accommodations

Students who have, or think they may have, a disability (*e.g.*, mental illness, learning, medical, hearing, injury-related, visual) are encouraged to contact Student Accessibility Services to arrange a confidential consultation. Instructors are notified by Student Accessibility Services what accommodations their registered students require which will help the instructor determine fair, feasible and reasonable academic accommodations without compromising academic standards. This takes time and planning, so reach out at the start of term.

SAS students can write their exams and tests in spaces organized by the SAS Exam Centre however they must register with the SAS Exam Centre a few weeks in advance. Please be sure to do so to receive the accommodations.

Medical Notes and Other Documentation

The Self-Declaration for Brief and Temporary Absences Procedure and Policy is effective as of September 1, 2022 and therefore students will not be required to present medical or other documentation for absences due to extenuating circumstances of 120 hours or less, however this form must be completed and submitted to the instructor in lieu of the documentation. Please note that further documentation may be requested from students who claim multiple temporary absences or absences for more than 120 hours.

Short-Term Academic Accommodations (up to 120 consecutive hours absences)

Students who miss a lab or assessment due to an extenuating brief or temporary absence should complete a self-declaration of brief absence form and submit it to their instructor **within 48 hours of the end of the brief absence**. The instructor will discuss with the student how the missed work can be made up.

- **Students absent for over 120 hours as a result of medical, compassionate, University scholastic, University athletic or religious event will require official documentation to explain the absence.** Students should reach out to instructors early if absences are anticipated.
- **Personal vacations and work requirements are not considered acceptable absences.**

Long-Term Academic Accommodations

Students with long-term academic accommodations are usually registered with Student Accessibility Services. The long-term academic accommodations are usually to accommodate long term physical or mental illness and accommodations can be in the form of notetaking, interpreting, assistive technology, and assessment accommodations.

Final Exams

Students who have conflicting scheduled exams should contact their faculty's academic advisors as soon as possible. Students who miss their exam due to extenuating, brief or temporary circumstances listed in the Self-Declaration for Brief and Temporary Student Absences Policy can apply for a deferred exam. Please note that the granting of a deferred exam is not necessarily guaranteed. **Also note that Faculty of Science students who have deferred more than two terms of final exams will be required to provide additional documentation beyond the self-declaration of brief absence form.**

Deferred Final Exams

Deferred final exams are usually written within 30 days of the regular exam. **For Winter 2024, deferred exams may be written as early as April 29, 2024.** Students missing the deferred exam will be required to apply for a re-deferred exam which is typically held the next time the course is offered (*i.e.*, missing the Winter 2024 deferred exam may mean that the next opportunity to write will be Winter 2025). The content and structure of the deferred exam may be different from that written in the regular examination period. **Students have a responsibility to check on the structure and expectations with the course instructor.**

Missed Lecture Notes

Students missing lecture notes as a result of absences are responsible for obtaining the missed content on their own accord. Contact a classmate or the course instructor for their notes but please be aware the instructor is not obliged to create notes for students as a result of absences.

Voluntary Withdrawal (VW) Policies

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, the course you have withdrawn from will be listed on your transcript; 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.

Students have the opportunity to voluntarily withdraw (VW) from this class up to March 20 (in the event of date discrepancies, please follow the dates on the Important Dates and Deadlines webpage). By then, you will have received feedback to allow you to assess your progress and determine if you are achieving the grade you are aiming for in this course. If you are unlikely to be successful in the course, or not achieving the grade that you are aiming for, you should consider a VW from the course. In advance of the VW date, you should contact your instructor to review your progress in more detail, or you may discuss the VW option with a Faculty academic advisor.

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, includes more information on the different ways in which you can withdraw from a course and important dates and deadlines to do so.

Professional Conduct

Students in the University community can freely express their thoughts, opinions, and beliefs however they must observe the Respectful Work and Learning Environment Policy and treat each other, staff, and faculty with respect. Students who are alleged to have breached the Respectful Work and Learning Environment Policy will be investigated and disciplined according to the Student Non-Academic Misconduct and Concerning Behaviour Procedure.

Academic Integrity

Academic integrity is taking responsibility for and being honest with your work and respecting the work of others. Since you are a member of the university community, we want you to learn what that responsibility and honesty entails and how we respect the work of others.

The Faculty of Science continues to uphold high standards of academic integrity. We know that you, our students, support us in this and we count on every one of you to do your part. We expect all students to strictly adhere to instructions from their professors regarding what resources can and cannot be used for assessments, to follow other rules the professors wish to set, and to adhere to the academic conduct standards of the University and Faculty.

To aid professors in assuring that all forms of assessments have been administered fairly, the University can electronically monitor all tests, quizzes and examinations, included, but not limited to overseeing chatrooms, relevant predatory websites and, in so doing, we will analyze scholastic evidence of individual exams.

Students who transgress academic integrity rules will be investigated and disciplined (if justified) according to the Student Discipline By-Law and Student Academic Misconduct Procedure.

The list of suggested minimum penalties assessed by the Faculty of Science for acts of academic misconduct is available on the Faculty of Science website.

Artificial Intelligence

Many of us have heard of, and perhaps even used, artificial intelligence tools like ChatGPT. Course instructors can decide whether artificial intelligence tools can be used in their courses. Artificial intelligence tools are not limited to artificial intelligence chatbots (e.g., ChatGPT) or image generators (e.g., DALL-E) but also writing and paraphrasing tools (e.g., Quillbot and Grammarly). Please refer to the syllabus or ask the instructor for clarity.

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 provides copyright resources and support for all members of the UM community.

Please respect copyright. We will use copyrighted content in this course. No audio or video recording of the lectures is allowed in any format, openly or surreptitiously, in whole or in part without permission from the instructor. University guidelines state that copyrighted works, including those created by the course instructor, are made available for private study and research, and must not be distributed in any format without permission. Since it is illegal, 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.

Your Rights And Responsibilities

As a student of the UM 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 Academic Calendar is one important source of information. View the sections of *University Policies and Procedures* and *General Academic Regulations*.

While all of the information contained in these two sections is important, the following information is highlighted.

- 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 website for more information including appeal deadline dates and the appeal form http://umanitoba.ca/registrar/

- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the **Academic Integrity** regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support http://umanitoba.ca/academicintegrity/ View the **Student Academic Misconduct** procedure for more information.

- 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 respectful manner. Policies governing behavior include the: Respectful Work and Learning Environment, Student Discipline and, Violent or Threatening Behaviour

- If you experience **Sexual Assault** or know a member of the University community who has, it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting. The **Sexual Violence** policy may be found at: https://umanitoba.ca/governance/governing-documents/governing-documents-university-community#sexual-violence. More information and resources can be found by reviewing the Sexual Assault site http://umanitoba.ca/student/sexual-assault/

For information about rights and responsibilities regarding **Intellectual Property** view the policy: https://umanitoba.ca/admin/governance/governing_documents/community/235.html

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 web site http://umanitoba.ca/faculties/

Contact an **Academic Advisor** within **YOUR** registered faculty/college or school for questions about your academic program and regulations http://umanitoba.ca/academic-advisors/

Student Advocacy
Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns.
http://umanitoba.ca/student/advocacy/
520 University Centre
204 474 7423
student_advocacy@umanitoba.ca