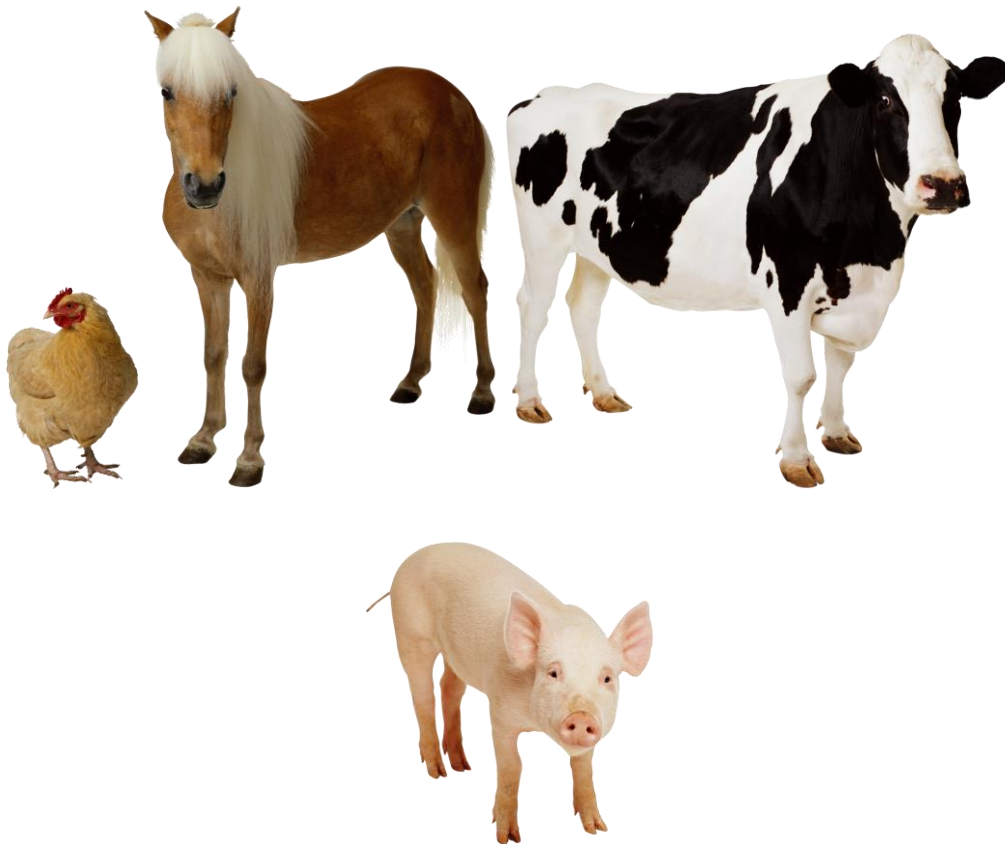




**University
of Manitoba**

**University of Manitoba
Faculty of Agricultural and Food Sciences
Department of Animal Science**



ANSC 3510 FEEDS AND FEEDING

Fall 2022

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COURSE DETAILS

Course Title & Number:	ANSC 3510 Feeds and Feeding
Credit Hours:	3.0
Term	Fall 2022
Class Times & Days of Week:	Lecture: Monday, Wednesday, and Friday; 12:30 – 1:20 pm Lab: Friday; 2:30 pm– 5:15 pm
Location for classes/labs/tutorials:	ANIMAL SCIENCE BUILDING Lecture: Room: 220 Lab: Room 107
Pre-Requisites:	ANSC 2520 Anatomy and Physiology 2: Nutrient Utilization

Instructor Contact Information

Instructor(s) Name:	Carla Plett
Preferred Form of Address:	Carla
Office Location:	149 Grad Student Hallway in Animal Science Building
Office Hours or Availability:	Individual assistance is always available by appointment.
Email:	<p>plettc35@myumanitoba.ca Use the University of Manitoba email accounts for all communication, quote the number of the course to which your query is directed (e.g. ANSC 3510) to avoid ambiguity.</p> <p>I will respond to e-mail within 24-48 hours during the week (Mon to Fri). Do not expect detailed or lengthy e-mail responses. If your e-mail question(s) require such a response I may ask you to meet me in person.</p>
Contact:	Email is my preferred method of contact.

Traditional Territory/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.

Equity and Inclusion Commitment

Everyone comes from all walks of life bringing with them various experiences and knowledge into the classroom, therefore I am committed to creating a diverse, equal, and safe learning environment for all students regardless of race, gender, sexual orientation, class, ability etc.

Course Description

The course gives a detailed discussion of feedstuffs used for domestic animals, animal nutrient requirements, ration balancing, feedstuff processing, and feed safety. Aspects of animal nutrition that include ration balancing, feedstuff preservation and processing, and feed safety are discussed. Various feedstuffs that are used to meet nutrient requirements of different classes and species of domestic animals are characterized and their properties including anti-nutritive factors are discussed. Methods of improving the nutritive value of feeds, including the use of various feed additives are also discussed.

Students are expected to be familiar with Microsoft Excel and Word and will have an opportunity to learn to use diet formulation software to make balanced livestock diets. Access to a laptop is recommended for some of the laboratory exercises.

General Course Information

Read through the syllabus at the beginning of the semester to ensure that you understand how overall performance in this course will be assessed. Two term tests, laboratory exercises/assignments, a group term paper and presentation, participation, and a final examination are the components of evaluation in this course. It is important to know at the onset, the percentage contribution, and the due date of each component in order to avoid rushing at the last minute to complete the assignments.

Course Goals

1. This course provides students with a solid understanding of:
 - Major feed ingredients used in livestock and poultry diets and why they are used
 - The process of formulating diets for livestock
 - Feed balancing programs used in food animal production
2. The course provides students with an opportunity to enhance their critical thinking skills, and oral and written communication skills through assignments
3. Students also learn basic concepts in feed preparation, handling, and preservation.

4. Students will develop problem-solving skills involved in the feeding of domesticated animals through case studies

Learning Outcomes

By the end of this course, students will be able to:

- Define major chemical components and their functions in animal feeds and feed ingredients;
- Classify animal feeds and feed ingredients;
- Illustrate how feed processing affects nutrient utilization by animals;
- Connect the laws and regulations regarding animal feeding and feed labeling to feed safety;
- Formulate a balanced ration to meet the nutrient requirements of an animal or a group of animals.

Using Copyrighted Material

Please respect copyright. We will use copyrighted content in this course. I have ensured that the content I use is appropriately acknowledged and is copied in accordance with copyright laws and University guidelines. Copyrighted works, including those created by me, 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 um_copyright@umanitoba.ca.

Recording Class Lectures

The instructor 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 the instructor. Course materials (both paper and digital) are for the participant's private study and research.

Course Materials

Readings

Required textbook – none required.

Recommended/ reference texts:

Cheeke, P.R. 2005. Applied Animal Nutrition (3rd edition), Pearson/ Prentice Hall Publishers

NRC, 1994. Nutrient Requirements of Poultry (9th edition), National Academies Press

NRC, 2021. Nutrient Requirements of Dairy Cattle (8th edition), National Academies Press

NRC, 2016. Nutrient Requirements of Beef Cattle (8th edition), National Academies Press

NRC, 2012. Nutrient Requirements of Swine (11th edition), National Academies Press

Leeson, S., and J. D. Summers. 2009. Commercial Poultry Nutrition (3rd edition), Nottingham University Press

Wu, G. 2018. Principles of Animal Nutrition, CRC Press.

All books can be found at the library of the University of Manitoba.

Supplies

Closed toed shoes will be required for various labs as part of safety protocols. The instructor will communicate with the students when closed toed shoes will be required for the lab session.

Students are expected to be familiar with Microsoft Excel and Word and will have an opportunity to learn to use diet formulation software to make balanced livestock diets. Access to a laptop is recommended for some of the laboratory exercises.

Course 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. The student can use all technology in the classroom setting only for educational purposes approved by the instructor and/or the University of Manitoba Disability Services. Students should not participate in personal direct electronic messaging / posting activities (e-mail, texting, video or voice chat, wikis, blogs, social networking (e.g. Facebook) online and offline “gaming” during scheduled class time. If the student is on call (emergency), the student should switch his/her cell phone on vibrate mode and leave the classroom before using it.

Class Communication

The University requires all students to activate an official University email account. For full details of the Electronic Communication with Students please visit:

[http://umanitoba.ca/admin/governance/media/Electronic Communication with Students Policy - 2014 06 05.pdf](http://umanitoba.ca/admin/governance/media/Electronic_Communication_with_Students_Policy_-_2014_06_05.pdf)

Please note that all communication between us (you as a student and myself) 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)). You are required to obtain and use your U of M email account for all communications between yourself and the university.

Expectations: I Expect You To

- Attend class and be on time as much as you can and ask for help.
- Prerequisites: Know the basic anatomy and physiology of the digestive system of various farm animals and the basic concept of matching nutrient supply to nutrient requirements.
- Adhere to university student academic and conduct guidelines.
- Complement the notes that I provide with your own notes that you take during lectures. The notes that I provide may be incomplete and you will be expected to attend lectures in order to complete your notes. You will also be evaluated based on your comprehension of material supplied in PowerPoint notes, handouts, and any relevant discussions during class.

- Complete all assignments on time.
- Produce university-level quality writing: legible and proofread. I encourage you to type and submit hard copies of assignments. If there are a significant number of errors or if it is difficult to read, the assignment will be returned to you prior to grading for changes.
- I will treat you with respect and would appreciate the same courtesy in return. See Respectful Work and Learning Environment Policy.

Academic Integrity:

Each student in this course is expected to abide by the University of Manitoba [Academic Integrity principles](#). Always remember to reference the work of others that you have used. Also, please 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 serious [disciplinary action](#). Visit the [Academic Calendar](#), [Student Advocacy](#), and [Academic Integrity](#) web pages for more information and support.

You are reminded that:

- 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 works should be completed independently unless otherwise specified.

Students Accessibility Services

Student Accessibility Services

If you are a student with a disability, please contact 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

Expectations: You Can Expect Me To

A large part of the course content is delivered in the form of PowerPoint presentations that are made available through UMLearn ahead of classes.

Be respectful of your questions and make every reasonable effort to answer them.

Provide feedback on tests and assignments in a fair, equitable, and prompt fashion.

Unit Schedule

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 the – ROASS- Procedure). The schedule should include dates and times of classes, including missed classes due to holidays or other commitments of the teacher. It also includes dates of assignments/quizzes/exams and alternate forms of assessments, the date for voluntary withdrawal, and dates when students can expect to receive their assignment or test grades.

1. Introduction to the course
 - i) General overview of the course, grading, assignments, and expectations
2. Nutrients and Digestion
 - i) Nutrient Classes
 - ii) Digestive Systems of Farm Animals
3. Evaluation of Feeds I
 - i) Techniques Used in Evaluating Feeds
 - ii) Measuring Nutrient Digestibility
4. Energy Sources in Livestock Nutrition
 - i) Energy Concentrates
 - ii) Forages and Roughages
5. Evaluation of Feeds II
 - i) Determination of Protein Requirements
 - ii) Determination of Protein Quality in Monogastrics
 - iii) Determination of Protein Quality in Ruminants
 - iv) Protein Sources in Livestock Nutrition
6. Micronutrients
 - i) Calcium and Phosphorus – Dietary Sources, Functions and Deficiency Symptoms
 - ii) Electrolyte minerals – Dietary Sources, Functions and Deficiency Symptoms
 - iii) Trace Minerals – Dietary Sources, Functions and Deficiency/Toxicity Symptoms
 - iv) Fat-soluble Vitamins – Dietary Sources, Functions and Deficiency Symptoms
 - v) Water-soluble Vitamins – Dietary Sources, Functions and Deficiency Symptoms
7. Feed Additives in Animal Nutrition
8. Anti-nutritional Factors of Feeds
9. Feed Manufacturing
 - i) Feed Manufacturing Process
 - ii) Feed Intake Regulations in Animal Nutrition

Class Schedule

Date	Lecture	Unit
Wed-Sep-7		<i>First day of classes for most faculties and schools.</i>
Wed-Sep-7	1	Introduction to the Course
Thu-Sep-8		
Fri-Sep-9	2	Categories of Nutrients
Mon-Sep-12	3	Digestive Tract Physiology 1
Tue-Sep-13		
Wed-Sep-14	4	Digestive Tract Physiology 2
Thu-Sep-15		
Fri-Sep-16	5	Techniques Used in Feed Evaluation
Mon-Sep-19	6	Determination of Digestibility of Feeds
Tue-Sep-20		<i>Last date for refund for dropped Fall Term courses</i>
Wed-Sep-21	7	Determination of Energy Value of Feeds
Thu-Sep-22		
Fri-Sep-23	8	Determination of Energy Value of Feeds
Mon-Sep-26	9	Energy Sources in Livestock Nutrition (Corn)
Tue-Sep-27		
Wed-Sep-28	10	Energy Sources (Other Cereals and Concentrates)
Thu-Sep-29		
Fri-Sep-30	11	<i>Truth and Reconciliation Day University Closed</i>
Mon-Oct-3	12	Energy Sources (Lipids)
Tue-Oct-4		
Wed-Oct-5	13	Energy Sources - Forages and Roughages (Hay, Pasture and Straw)
Thu-Oct-6		
Fri-Oct-7		<i>TEST 1 (Covers lectures 1-13 and all materials covered in tutorials and labs from September 9 to September 30, 2022)</i>
Mon-Oct-10	<i>Thanksgiving Day - university closed</i>	
Tue-Oct-11		
Wed-Oct-12	14	Energy Sources - Forages and Roughages (Silage)
Thu-Oct-13		
Fri-Oct-14	15	Energy Sources – Forage Sampling & Practical Value of Forages in Ruminant Nutrition
Mon-Oct-17	16	Determination of Protein Value of Feeds II - Ruminants
Tue-Oct-18		
Wed-Oct-19	17	Determination of Protein Value of Feeds II - Monogastrics
Thu-Oct-20		
Fri-Oct-21	18	Determination of Protein Value of Feeds II – Monogastrics
Mon-Oct-24	19	Sources of Dietary Protein in Livestock Nutrition
Tue-Oct-25		
Wed-Oct-26	20	Sources of Dietary Protein in Livestock Nutrition (wrap up)
Thu-Oct-27		
Fri-Oct-28	21	Micronutrients (Calcium and Phosphorus)

Mon-Nov-7		<i>Fall Term Break: No classes or examinations Remembrance Day (November 11)- University Closed</i>
Tue- Nov-8		
Wed- Nov-9		
Thu- Nov-10		
Fri- Nov-11		
Mon-Nov-14	22	Micronutrients (Electrolyte Minerals)
Tue-Nov-13		
Wed-Nov-15		<i>TEST 2 (Covers lectures 14 – 22 and all materials covered in tutorials and labs from October 15 to October 28, 2022)</i>
Thu-Nov-16		
Fri-Nov-17	23	Micronutrients (Trace Minerals)
Mon-Nov-21	24	Micronutrients (Fat-soluble Vitamins)
Tue-Nov-22		<i>Voluntary Withdrawl (VW) deadline</i>
Wed-Nov-23	25	Micronutrients (Water-soluble Vitamins)
Thu-Nov-24		
Fri-Nov-25	26	Anti-nutritional Factors-I
Mon-Nov-28	27	Anti-nutritional Factors-II
Tue-Nov-29		
Wed-Nov-30	28	Feed Intake Regulations in Animal Nutrition
Thu-Dec-1		
Fri-Dec- 2	29	Feed Additives-I
Mon-Dec-5	30	Feed Additives-II
Tue-Dec -6		
Wed- Dec-7	31	Feed Manufacturing-I
Thu- Dec-8		
Fri- Dec-9	32	Feed Manufacturing-II
Mon-Dec-12		Review (Classes end in most faculties and schools)
Dec 13 to 23		<i>Final examination period. Students must remain available until all examination obligations have been fulfilled.</i>

Laboratory Expectations

I expect students to fully participate in laboratory and tutorial activities. Students are not required to have completed any safety training such as WHMIS because student participation is kept to a minimum/ observation only. Students will be expected to complete laboratory exercises during the lab period and submit them before leaving. There will not be any make-up exercises for missed labs. Only diet formulation exercises can be completed and submitted electronically. The due date for each of the diet formulation assignments will be stated on each assignment.

Lab Schedule

Lab	Date	Topic
1	Sept 16 Forage Lab Glenlea Research Farm	Tour of feed kitchen and feed storage at dairy barn Forage identification, forage and moisture testing, feed particle size. <i>*Closed toed shoes required*</i>
2	Sept 23 Feed Identification	Feed identification of common ingredients used in feed manufacturing
3	October 7 Premix Mill Tour Glenlea Research Farm	Principles of feed manufacturing including receiving grains/ or feedstuff, cleaning grain, particle size reduction, and mixing, post-mixing treatments such as pelleting. <i>*Closed toed shoes required*</i>
4	October 14 Poultry Diets	Diet Formulation- Poultry (Guest Speaker)
5	Oct 21 Commercial Feed Mill Tour MasterFeeds	Feed processing and manufacturing <i>*Closed toed shoes required*</i>
6	Oct 28 Nutrition Lab Tour and Analytical Methods	Determining digestibility coefficients of feeds. Laboratory tours of nutrition labs. <i>*Closed toed shoes required*</i>
7	Nov 4	Designing and Interpreting Feed tags
8	Nov 18 Ruminant Diets	Diet Formulation – Ruminant (Guest Speaker)
9	Nov 25 Swine Diets	Diet Formulation- Swine (Guest Speaker)
10	Dec 2	Case Studies
11	Dec 9 Extension article	<i>Extension Presentations and Articles</i>

Course Evaluation Methods

Each term test will comprise multiple-choice questions (max 10 marks), short answer questions (max 15 marks), and long answers with calculations or applied animal nutrition focus (max 30 marks). The total marks for each term test are 50 marks.

The final examination will have the components described above but multiple-choice and some short answer questions will come from the last portion of the syllabus not tested in term test 1 and term test 2. Some of the short answer questions and most of the long answer type questions would come from the portions of the syllabus previously tested in the term test.

The format of the laboratory assignments will be dictated by the topics covered.

Due Date:	Assessment Tool	Value of Final Grade, %
As per Class schedule	Term test 1	15
As per Class schedule	Term test 2	15
	Lab (5%) and Course Assignments (10%)	15
As per Lab schedule	Extension Article and Presentation	10
	Participation	10
TBA	Final examination	35

Grading

Letter Grade	Percentage out of 100	Grade Point Range	Final Grade Point
A+	92-100	4.25-4.5	4.5
A	85-91.9	3.75-4.24	4.0
B+	78-84.9	3.25-3.74	3.5
B	70-77.9	2.75-3.24	3.0
C+	62-69.9	2.25-2.74	2.5
C	55-61.9	2.0-2.24	2.0
D	50-54.9	Less than 2.0	1.0
F	Less than 50		0

Referencing Style

Assignments should use the citation format adopted by the Canadian Journal of Animal Science: <http://www.nrcresearchpress.com/page/cjas/authors>

Make sure you cite only literature that is highly relevant and avoid multiple citations on the same point.

Check each reference with the original article and refer to it in the text by the author and date;

Examples of correct citations:

Following the overnight incubation, membranes were washed (6×10min) in 1×TBS with 0.1% Tween-20 and incubated at room temperature for 1 h with a secondary donkey anti-rabbit HRP-conjugated IgG (1:10 000 dilution in 6% skim milk powder, Promega) (Yang et al. 2016).

Gozho et al. (2005) used a threshold of a rumen pH depression between pH 5.2 and 5.6 for at least 3 h/day, and feed intake was only reduced and inflammation only occurred at equal or greater rumen pH depressions.

Studies by Gozho et al. (2007) and Khafipoor et al. (2006) showed that grain-induced SARA also increased SAA in lactating dairy cows (Table 1).

List multiple references in the text in chronological order. Use “et al.” when there are more than two authors but give all authors in the reference list at the end of your assignment.

Example of how references should be compiled at the end of your assignment (note bolding, spacing of initials, capitalization, and punctuation).

Extension Article Assignment Descriptions

The extension article assignment is aimed at getting students to review a scientific publication that covers some aspects covered in the course in order to:

- a) Determine what the paper seeks to address and why it is important in feeds and feeding
- b) How the investigators achieve their objective – i.e. what methods or techniques are used
- c) What are their findings – here students are expected to communicate the findings in plain language that a farmer can understand. However, avoid over-simplifying the findings!
- d) Students will work in groups of at least two and must submit the extension-type article and give a PowerPoint presentation of their article.

Term Project Timeline

Friday September 16th

- Email groups to instructor (two students per group)
- Students not in a group by the end of the end will be place in one.

Friday September 23rd

- Email scientific article to instructor for approval

Friday December 9th

- Extension Presentation and article due
- Presentations will take place during the lab period
 - o 12-15 minutes for presentation
 - o 3 minutes for questions

Assignment Grading Times

Students can expect to receive their graded assignments within one week of submission. Once graded, marks will be uploaded to UMLearn and students will have an opportunity to know the marks even before they pick up their assignments.

Criteria for grading assignments

There will be 10 laboratory exercises, three course assignments, and an extension article and presentation in this course. Rubric for each assignment is on UM Learn course directory. For laboratory exercises the lowest two grades will be dropped.

Assignment Extension and Late Submission Policy

Late submissions are discouraged and may not be accepted without valid reasons (such as a doctor's note etc.). Even where such submissions are accepted, they will attract a 10% reduction in the final mark achieved. Electronic submissions will strictly be set such that the system would not accept submissions past the stipulated time (such as midnight).

University Support Office & 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 [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

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. 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 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).

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/>)

COVID19

The Department of animal science in consultation with 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.

For more information on COVID-19 health and safety protocols at the University of Manitoba please visit: [COVID-19 health and safety protocols | University of Manitoba \(umanitoba.ca\)](#)