

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

# Syllabus

Special Topics in Animal Health and Physiology

ANSC 7530

(Fall 2022)



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## COURSE DETAILS

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<b>Course Title &amp; Number:</b>	ANSC 7530 - Special Topics in Animal Health and Physiology
<b>Number of Credit Hours</b>	3.0
<b>Pre-Requisites:</b>	N/A

## Instructor Contact Information

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<b>Instructor(s) Name &amp;</b>	Dr. Meagan King
<b>Preferred Form of Address:</b>	Please call me Meagan!
<b>Office Hours or Availability:</b>	I'm happy to answer questions or chat before and after class. If you would like more time or some privacy, please contact me via email to arrange a meeting outside of class.
<b>Office Phone No.</b>	I do have an office phone but don't really use it: (204) 474-7697239 in Animal Science/Entomology Building
<b>Email:</b>	<a href="mailto:Meagan.King@umanitoba.ca">Meagan.King@umanitoba.ca</a> Please write me <i>at least semi</i> -professional emails (i.e. Hello Meagan or Dr. King, sign off with your name). If you email me, I will try my best to reply within 24h. I may respond to emails at strange times if I am working outside of business hours, but I do not expect you to reply at that time.
<b>Contact:</b>	It is best to contact me through email! <a href="mailto:Meagan.King@umanitoba.ca">Meagan.King@umanitoba.ca</a>

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## COURSE DESCRIPTION

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### U of M Course Calendar Description

Students will investigate a minor research question in an area of animal health and physiology other than that in which the major is being taken. Research questions may address areas such as digestion, metabolism, behaviour, welfare, immunity, reproduction, environment, housing, management, or use of precision technology.

### General Course Description

This course will be based on a combination of lectures, discussions, and student presentations using a “flipped learning” approach. This enables students to select topics of interest to them which will most benefit their own research. This course is designed to supplement students’ research programs by broadening the scope of their knowledge beyond the traditional topics covered, which may benefit their understanding of their own research or may introduce new ideas. With many interconnections between animal health and physiology, as well as many other fields of research, there are unlimited things to learn to augment their understanding of animal science. Related topics include animal behaviour, welfare, nutrition, genetics, housing, management, transportation, slaughter practices, and handling methods.

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## Course Goals

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My goal is for you to develop a broad base of knowledge and skills pertaining to animal health, welfare, and physiology that you can apply throughout your academic career and beyond. I also aim to help develop your soft skills, such as presentation style and confidence, scientific communication and extension to non-academic audiences, and respectful and inclusive discussion techniques.

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## Course Learning Objectives

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Upon completion of this course, students should:

- Understand how aspects of the various Codes of Practices for farm animals are based on evidence regarding animal physiology, welfare, health, behaviour, and/or production
- Be able to critique a journal article and identify strengths and weaknesses
- Be able to describe the various physiological mechanisms regulating an animals' response to changes in diet, housing, management, or husbandry
- Be able to relate animal physiology to animal health and welfare in various practical scenarios
- Be able to demonstrate the physiological responses to pain and stress and the welfare, health, and performance implications of those responses
- Understand the limitations of using physiological measures to assess animal health and welfare, and how we can supplement that with other information such as animal behaviour or production-based measures
- Have a broad understanding of other species covered by other students in the class through presentations and discussions

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## COURSE MATERIALS AND TECHNOLOGY

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**There is no required textbook for this course.** All required and supplemental readings will be available online through UM Learn or can be accessed online through the library.

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## EXPECTATIONS AND POLICIES

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### I EXPECT YOU TO:

- Attend class during synchronous lectures and actively participate in learning activities. Classes will be held every Thursday starting at 8:30 or 9 am until 11:20 am. **Attendance is expected, and participation grades will be assigned based on the quality and quantity of your contributions to our discussions. But if you are feeling unwell, don't worry!** You can attend virtually if needed or skip a class if needed. Participation grades will reflect the entire course, not every single class individually.
- Class discussions be based on lectures, assigned readings, and student presentations.
- Treat me and your classmates with respect and compassion.
- Regularly access UM Learn site and University of Manitoba student e-mail to access course information.
- Seek clarification from Instructor regarding the contents of this course outline if required.
- Be aware of and comply with University of Manitoba Policies and Procedures.
- Listen attentively and do not disturb others during class.

- Refrain from using cell phones and other communication devices during class.
- Use professional, clear communication when e-mailing instructors and classmates.
- Serve as a good ambassador for the Animal Science program and the Agricultural Community.

**YOU CAN EXPECT ME TO:**

- Treat you with respect and compassion.
- Be available and supportive outside of class to discuss course content or how to manage other factors affecting your academic performance.
- Provide feedback within 2-3 weeks of submitting your assignments.
- Reply to your emails within 24 h.

**Communication Protocols:**

You are required to obtain and use your University of Manitoba email account for all communication between yourself and the university. All communication must comply with the Electronic Communication with Student Policy:

[http://umanitoba.ca/admin/governance/governing\\_documents/community/electronic\\_communication\\_with\\_students\\_policy.html](http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html)

**Student Accessibility Services:**

The University of Manitoba is committed to providing an accessible academic community. [Students Accessibility Services \(SAS\)](#) 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 illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services

520 University Centre

Phone: (204) 474-7423

Email: [Student\\_accessibility@umanitoba.ca](mailto:Student_accessibility@umanitoba.ca)

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## COURSE SCHEDULE

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

Time	Date	Class agenda	Homework
9am	Sept 8	Introduction to course and participants	Read mindfulness articles for discussion
9am	Sept 15	<b>Visit from Kim Ominski</b> <b>Discussion:</b> Grad school, mental health, and physiological mechanisms of mindfulness	Relax!
9am	Sept 22	<b>Lecture:</b> Intro to NFACC Codes of Practice and Scientists' Committee Reports	Work on NFACC assign. & prepare for discussion
9am	Sept 29	<b>Discussion:</b> NFACC Codes/Reports, <b>submit NFACC assign.</b>	Relax!
9am	Oct 6	<b>Lecture:</b> Journal article critique	Read article for discussion
9am	Oct 13	<b>Discussion:</b> Journal article critique <b>Lecture:</b> <i>potentially</i> a lecture from Kees Plaizier about nutrition, physiology, and the effects of feeding high starch feed to animals	Prepare for presentation #1
8:30am	Oct 20	<b>Student presentation #1:</b> Journal article critique	Relax!
9am	Oct 27	<b>Lecture:</b> Physiology and other methods to assess welfare	Prepare presentation #2
8:30am	Nov 3	<b>Student presentation #2:</b> Common health disorders	Relax!
STAY HOME	Nov 10	NO CLASS - TERM BREAK	Relax!
9am	Nov 17	<b>Lecture:</b> Physiology of pain and stress	Work on protocol
STAY HOME	Nov 24	No class – work on protocol presentation	Work on protocol pres.
9am	Dec 1	<b>Student presentation #3:</b> Research protocol	Work on written protocol
9am	Dec 8	<b>Student presentation #3:</b> Research protocol <b>Hand in written protocol</b> (Spare class in case if needed)	

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## Voluntary Withdrawal

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If you drop the class before Sept 20, 2022, you will receive a 100% refund. Therefore, the last day to drop a class is Sept 20, 2022. The Voluntary Withdrawal deadline is Nov 22, 2022. If you withdraw from the course after Nov 22, 2022, there will be no refund. Note that withdrawn courses will be recorded on your official transcript. Please contact me ahead of the withdrawal date if you would like to discuss your progress and strategies for improvement. Refer to the [Registrar's Office](https://umanitoba.ca/registrar/important-dates-deadlines) web page for more information. <https://umanitoba.ca/registrar/important-dates-deadlines>

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## COURSE ASSESSMENT

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|--|----------------|---------------------------|
| <b>1) Written assignment #1: NFACC Codes of Practice</b>   | <b>Sept 29</b> | <b>15% of final grade</b> |
| <ul style="list-style-type: none"><li>- Review National Farm Animal Care Council (NFACC) Code of Practice Requirements, Recommendations, and Scientists' Committee Reports for your study species</li><li>- Select 5 animal health-related requirements/recommendations and provide a description of physiological mechanisms and scientific evidence linking animal management, housing, or handling to animal health, productivity, or product quality (5 pages, double spaced, plus references)</li></ul>   |                |                           |
| <b>2) Presentation #1: Journal article overview &amp; critique</b>   | <b>Oct 20</b>  | <b>15% of final grade</b> |
| <ul style="list-style-type: none"><li>- Journal critique of an article studying animal health and physiology (15 min talk plus 5-10 min for questions/discussion)</li><li>- Presentation should be geared towards an academic audience of animal scientists</li></ul>  |                |                           |
| <b>3) Presentation #2: Common health disorders</b>   | <b>Nov 3</b>   | <b>20% of final grade</b> |
| <ul style="list-style-type: none"><li>- Presentations of physiological mechanisms behind the top 3 health disorders of your study species and how they affect animal health, productivity, and product quality (15 min talk plus 5-10 min for questions/discussion)</li><li>- Presentation should be geared towards farmers and members of industry or an undergraduate course, but not researchers! Make sure to use infographics, short video clips, or images to be engaging</li></ul>  |                |                           |
| <b>4) Presentation #3: Research project/protocol design</b>  | <b>Dec 1</b>   | <b>20% of final grade</b> |
| <ul style="list-style-type: none"><li>- Design a research project with no financial constraints to objectively measure animal health and welfare using physiological, behavioural, and production-based outcomes under different experimental treatments of interest (i.e., nutritional study with different diets, drug trial testing different medications, or comparison of housing aspects or design, etc.)</li><li>- Presentation should be geared towards a mixed audience of academics and industry members (20 min talk plus 10-15 min for questions/discussion)</li></ul> |                |                           |
| <b>5) Written assignment #2: Research protocol</b>   | <b>Dec 8</b>   | <b>20% of final grade</b> |
| <ul style="list-style-type: none"><li>- Describe your research project with a thorough background/lit review, methods, etc. (10 pages, double spaced, plus references)</li></ul>   |                |                           |

**6) Class attendance/participation**

**Entire term 10% of final grade**

- For the class attendance/participation portion, students will be evaluated based on their attendance and the quality and quantity of their contributions to class discussions.
- If you do miss one class, it's OK! Your grade will reflect your entire term participation.

A rubric and further information will be provided to students in preparation for assignments.

Letter Grade	Percentage	Final Grade Point
A+	92-100	4.5
A	85-91.9	4.0
B+	78-84.9	3.5
B	70-77.9	3.0
C+	63-69.9	2.5
C	56-62.9	2.0
D	50-55.9	1.0
F	<50	0

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### Referencing Style

Whichever academic journal you read and cite most will be the referencing style you should use. Be consistent and be accurate! Meagan is meticulous!!!!

Check out the “Instructions for Authors” section of journal websites for details.

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### Assignment Feedback

Within 2 to 3 weeks of submitting your assignments or giving presentations, Meagan King will provide formative (i.e., comments) and summative (i.e., grade) feedback through UM Learn.

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### Assignment Extension and Late Submission Policy

Written assignments are to be submitted through UM Learn on the due date by 10 pm. UM Learn automatically date-stamps assignments. There will be a hard cut off at that point, after which, there will be a late penalty of 5% per day (including weekend days). Presentations are to be given on the date specified during class time. Late presentations will be docked 35% each week they are delayed. Therefore, assignments will not be accepted beyond 3 weeks after the due date.

You may experience challenging circumstances for which extensions may be permitted. Please contact Meagan King a minimum of 1 week prior to due dates to explain your situation and she will try to accommodate. If you have a research trial or related activities which prohibit your attendance for a small number of classes, she will help work around this, in discussion with your supervisor.

***Try your best to contact me BEFORE your stress/schedule seems unmanageable. I am more than happy to help direct you to resources that can help you survive and thrive during your time as a grad student!***

## Academic Integrity

Each student in this course is expected to complete their coursework and programs of study with integrity by making a commitment to the six fundamental values of honesty, trust, fairness, respect, responsibility, and courage. <http://umanitoba.ca/student-supports/academic-supports/academic-integrity>

Academic integrity looks like referencing the work of others that you have used and completing your assignments independently unless otherwise specified.

If you are encouraged to work in a team, ensure that your project is completed with integrity. You must also do your own work during exams. Plagiarism, duplicate submission, cheating on quizzes, tests, and exams, inappropriate collaboration, academic fraud, and personation are in violation of the Student Discipline Bylaw and will lead to the serious [disciplinary action](#). Visit the [Academic Calendar](#), [Student Advocacy](#), and [Academic Integrity](#) web pages for more information and support.

Specific course requirements for academic integrity for individual and group work include:

- I. All work should be completed independently unless otherwise specified,
- II. Students will be made aware of any specific instructions concerning study groups and individual assignments;
- III. Sharing of notes and other materials, such as assignment and exam questions that were provided by the instructor is prohibited, unless otherwise stated. This means that you are not allowed to upload the instructor's intellectual property to a note-sharing or tutoring website without explicit permission.

## 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](mailto:um_copyright@umanitoba.ca).

**Note:** *Course material is copyrighted by Meagan King, 2021. No audio or video recording of this material, lectures, or presentations is allowed in any format, openly or surreptitiously, in whole or in part without permission of Meagan King. Course materials (both paper and digital) are for the participant's private study and research, and must not be shared without permission from Meagan King. Violation of these and other Academic Integrity principles, will lead to serious disciplinary action.*

### **Copyright info:**

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 University of Manitoba community. Visit <http://umanitoba.ca/copyright> for more information.

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## LEARNER SUPPORT

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### Academic supports you may find helpful:

#### Writing and Learning Support

The Academic Learning Centre (ALC) offers writing and learning supports to help you throughout your academic program. These supports are offered online during the Covid-19 pandemic.

Make an appointment with an ALC writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. The ALC also has an English as an Additional Language (EAL) specialist available to work with students on improving their English-language academic writing skills.

Consult an ALC learning specialist or attend an academic skills workshop to improve your time management, learning strategies and test-taking strategies. Get support in select courses by making an appointment with an ALC content tutor. The ALC also offers peer-facilitated study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In SI study groups, students ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

In addition to one-to-one and group sessions, you can also find writing and study tip sheets and videos on the ALC website.

Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at: <http://umanitoba.ca/student/academiclearning/>

Contact the Academic Learning Centre by calling 204-480-1481 or emailing [academic\\_learning@umanitoba.ca](mailto:academic_learning@umanitoba.ca). Bannatyne students can contact the Bannatyne Student Services office at 204-272-3190.

#### University of Manitoba Libraries (UML)

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](#). Regularly check our [COVID-19 Update](#) page for available library services and access to resources for Fall 2020

## **Mental & physical health supports you may find helpful:**

**For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.**

### **Student Counselling Centre**

Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. *Student Counselling Centre:*

<http://umanitoba.ca/student/counselling/index.html>

474 UMSU University Centre or S211 Medical Services Building

(204) 474-8592

### **Student Support Case Management**

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.

<http://umanitoba.ca/student/case-manager/index.html>

520 UMSU University Centre

(204) 474-7423 (Student Support Intake Assistant)

### **University Health Service**

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation. Note that due to fire displacement, UHS is unable to provide in-person medical care on the Fort Garry Campus until October, 2020.

*University Health Service* <http://umanitoba.ca/student/health/>

(204) 474-8411 (Business hours or after hours/urgent calls)

### **Health and Wellness**

Contact our Health and Wellness Educator if you are seeking information on health topics, including physical and mental health concerns, alcohol and substance use harms, or sexual violence. You can also access peer support from a *Healthy U* peer health educator.

*Health and Wellness Educator*

<https://umanitoba.ca/student/health-wellness/welcome-about.html>

[britt.harvey@umanitoba.ca](mailto:britt.harvey@umanitoba.ca)

469 UMSU University Centre

(204) 295-9032

### **Sexual Violence Resource Centre**

Contact SVRC if you have experienced sexual violence or are seeking information about how to help somebody else. SVRC provides inclusive, survivor-centred, trauma-informed services, such as consultation, referrals, safety planning, and a range of on-site supports, including counselling by Clinic.

*Sexual Violence Resource Centre*

<https://umanitoba.ca/student-supports/sexual-violence-support-and-education>

[svrc@umanitoba.ca](mailto:svrc@umanitoba.ca)

537 UMSU University Centre

(204) 474-6562 (Sexual Violence Intake and Triage Specialist)

### **Student Services at Bannatyne Campus**

Contact SS@BC to access a full range of resources and supports for learners at the Rady Faculty of Health Sciences. Services are provided through a one-stop hub that includes a range of supports for personal and academic success, including counselling, mental health consultation, and spiritual care.

*Student Services at Bannatyne Campus*

<https://umanitoba.ca/student-supports/student-services-bannatyne-campus>

[bcss@umanitoba.ca](mailto:bcss@umanitoba.ca)

### **S211 Medical Services Building**

**(204) 272-3190 (Intake and Triage Specialist)**

Please check out the University and Unit policies, procedures, and supplemental information available on-line:

#### **Your rights and responsibilities**

As a student of 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 [Academic Calendar](http://umanitoba.ca/student/records/academiccalendar.html) <http://umanitoba.ca/student/records/academiccalendar.html> is one important source of information. View the sections *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**

[http://umanitoba.ca/admin/governance/governing\\_documents/community/230.html](http://umanitoba.ca/admin/governance/governing_documents/community/230.html)

**Student Discipline**

[http://umanitoba.ca/admin/governance/governing\\_documents/students/student\\_discipline.html](http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html)

**Violent or Threatening Behaviour**

[http://umanitoba.ca/admin/governance/governing\\_documents/community/669.html](http://umanitoba.ca/admin/governance/governing_documents/community/669.html)

- 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 Assault** policy may be found at:

[http://umanitoba.ca/admin/governance/governing\\_documents/community/230.html](http://umanitoba.ca/admin/governance/governing_documents/community/230.html)

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](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 our 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](mailto:student_advocacy@umanitoba.ca)