

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

Syllabus

The Animal and its Environment

ANSC 3530

(Winter 2022)



COURSE DETAILS

Course Title & Number:	ANSC 3530 The Animal and its Environment
Number of Credit Hours	3.0
Pre-Requisites:	Prerequisite: ANSC 2520.

Instructor Contact Information

Instructor(s) Name &	Dr. Meagan King
Preferred Form of Address:	Please call me Meagan!
Office Hours or Availability:	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.
Office Phone No.	N/A at the moment
Email:	Meagan.King@umanitoba.ca Please write me <i>at least semi-professional</i> emails (i.e. Hello Meagan or Dr. King, sign off with your name). If you email me, <u>I will try my best to reply within 48h.</u> 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.
Contact:	It is best to contact me through email!

COURSE DESCRIPTION

U of M Course Calendar Description

Deals with how the animal is influenced by its environment to affect health, welfare and performance. Principles of farmed animal behavior, welfare and behavioral management, health, and facility design and modification will be considered in the context of animal/environment interactions.

General Course Description

This course will be based on a combination of lectures, case studies, discussions, and labs where students will learn about animal housing and management to optimize animal health, welfare, and productivity. Students will gain practical skills and knowledge regarding animal handling, animal welfare, underrepresented perspectives, and behavioural data collection. At the end of each class, there will be a short review period where we will assess students' understanding of lecture content and the most important/interesting things learned that day.

Course Goals

My goal is to enhance your understanding of how livestock are influenced by and interact with their environment to affect health, welfare and performance, and to understand and be able to apply principles of farmed animal behaviour, welfare requirements, health, and facility design in the context of animal-environment interactions. 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. Important skills to refine will include critical thinking, improving sustainability, society, ethics, and equity, and self-reflection throughout the course. Dr. King and students will practice adapting and incorporating feedback to build resiliency, and will practice respecting others values, opinions, backgrounds while incorporating other perspectives to build knowledge in multicultural and multidisciplinary teams. These skills will help us better understand and solve problems at local, national and global scale. My goal is to build confidence, accountability, leadership, team work, and management of time, conflict, stress, and risk. We will practice communicating effectively, based on the audience, mode of communication, level, type of information, demonstrating respect, social and emotional intelligence and empathy.

Course Learning Objectives

Upon completion of this course, students should:

- Be able to define stress and the various adaptations to environmental impingements animals encounter in animal agriculture.
- Be able to demonstrate the physiological responses to stress and the welfare, health and performance implications of those responses.
- Be able to demonstrate how the duration and intensity of light we provide for animals can affect welfare and performance of animals in controlled housing.
- Be able to indicate how animals respond to environmental temperatures outside their comfort zones and how these responses aid their survival and/or well-being during these times of temperature challenge.
- Understand common social, maternal, feeding (etc.) behaviours and how to use this knowledge of normal behaviours to recognize abnormal behaviours.
- Be able to demonstrate what these abnormal behaviours may indicate about the animals' environment. Be able to discuss how we use animal behaviour to best handle animals.
- Know how to access and utilize the Codes of Practice for farm animals.
- Be able to discuss factors that influence air quality and health in confined facilities.
- Understand and respect different perspectives and underrepresented groups such as Indigenous communities.

COURSE MATERIALS AND TECHNOLOGY

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.

EXPECTATIONS AND POLICIES

I EXPECT YOU TO:

- **Try your best to attend class during synchronous lectures and actively participate in learning activities. Classes will be held every Monday, Wednesday, Friday from 11:30am to 12:20pm. Labs are held Fridays from 2:30 to 5:15pm.**

- Treat me and your classmates with respect and compassion.
- Regularly access UM Learn site and U 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 48 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

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

COURSE 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 ROASS](#).

Pink boxes are mandatory/marked in class assignments or exams held online.

Orange boxes are holidays.

Blue boxes are mandatory/marked online labs/tutorials/review sessions.

Green boxes are mandatory labs that will be voluntary to attend in person. Those who do not attend in-person will be given access to videos and data to complete their assignments.

Date	Class Topic	Lab Topic
24-Jan	Intro to course and adaptation	
26-Jan	The nervous system	
28-Jan	Intro to thermoregulation	Guest lecture: Qiang Zhang Ventilation
31-Jan	Cold Stress	
02-Feb	Heat Stress	
04-Feb		Introduction to animal behaviour
07-Feb	Biological rhythms, photoperiod, responses to light	
09-Feb	Read One Health and Reconciliation paper	
11-Feb	Casual Conversation with Valli Fraser-Celin re: Dogs in Remote Communities	Watch Siemens farm videos
14-Feb	Casual Conversation with Harley Siemens from Siemens Farms Ltd.	
16-Feb	Review class	
18-Feb	Midterm	No lab. Relax!
Feb 21-25	Winter Term break	
28-Feb	Social and agonistic behaviour	
02-Mar	Feeding behaviour	
04-Mar	Sexual and maternal behaviour	Guest lecture: Laurie Connor re: Swine Housing
07-Mar	Anomalous behaviour	
09-Mar	Handling and transportation	
11-Mar	Meagan might be away - work on special topics paper (due March 18)	
14-Mar	Human-animal interactions	
16-Mar	Ethology in practice - prep for barn visits	
18-Mar	Animal welfare and behaviour	Hen lab
21-Mar		
23-Mar	Read livestock conflict paper	
25-Mar	Discussion about paper	Hen lab
28-Mar	Casual Conversation with Kyle Bobiwash Re: Indigenous perspectives	
30-Mar	Confinement of animals: space considerations and requirements	
01-Apr		Present hen project
04-Apr	Confinement of animals: health considerations and requirements	
06-Apr		
08-Apr		Glenlea dairy housing/handling lab
11-Apr	Work on dairy project	
13-Apr	Work on dairy project	
15-Apr	Good Friday	
18-Apr	Present dairy project	
20-Apr		
22-Apr		Review session for final exam
25-Apr	Final exam (during class)	

Voluntary Withdrawal

If you drop the class before Feb 4, 2022, you will receive a 100% refund. Therefore, the last day to drop a class is Feb 4, 2022. The Voluntary Withdrawal deadline is April 25, 2022. If you withdraw from the course after April 25, 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>

COURSE ASSESSMENT

1) February 18 Midterm	Feb 18	15% of final grade
<ul style="list-style-type: none"> - Open book exam of material covered up until and including Feb 14 - We will have a review class on Feb 16 		
3) Special topics paper	March 18	15% of final grade
<ul style="list-style-type: none"> - Designed to allow the student to delve more deeply into a topic introduced in the course or to pursue an area not covered in the course they feel is relevant to environment and animal health, welfare or performance. - Topic choice should be communicated to course instructor to ensure no overlap between students. If another topic is chosen, prior approval is required. - Will have class time on March 11 to work on paper - A rubric will be provided 		
4) Present hen project	April 1	10% of final grade
<ul style="list-style-type: none"> - Students will analyze what effect additional environmental enrichment (toys, hanging vegetables, extra dust baths) has on feeding, preening, and social pecking behaviours of birds in the free-run fertile pen - Presentations will be given in pairs - A rubric will be provided 		
5) Present dairy project	April 18, 20, 22	10% of final grade
<ul style="list-style-type: none"> - Students will learn to monitor cow behaviour using live observations as well as precision technology (such as their rumination/activity collars). Students will then learn to format their own data as well as data collected by collars and the milking robot. They will then analyze these data to determine the differences in rumination, activity, and milk yield between primiparous and multiparous cows, and between healthy cows and those with naturally occurring illness near the time of our visit. Illness information will be collected from the farm computer. - Presentations will be given independently - A rubric will be provided 		
6) Final exam (during class time)	April 25	20% of final grade
<ul style="list-style-type: none"> - Open book exam but will be heavy on the application of your knowledge acquired - Mostly material from Feb 28 onwards, with some concepts from the first half of the course - We will have a review class on April 22 during our lab slot 		
7) Lab attendance/participation (6 labs x 5% each)	Entire term	30% 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.
- This includes labs, guest lectures, and review sessions.
- **Jan 28, Feb 11, 14, March 4, 28:** lab and guest lectures
- **April 22:** Review session for final exam – students will help prepare for and participate in this session! Details will be provided in advance.

Voluntary labs include:

- **March 18 and 25:** Covid-permitting, students will spend time with the laying hens in the poultry facility on campus. We will visually monitor hen behaviour in the 3 different housing systems (free run, large vs. small enriched cages and conventional cages). Students will observe what effect additional environmental enrichment (toys, hanging vegetables, extra dust baths) has on feeding, preening, and social pecking behaviours of birds in the free-run fertile pen.
- **April 8:** Covid-permitting, students will travel to the Glenlea dairy barn for 1 lab session (April 8 from 2:30-5:20pm) where they will learn about the key behaviours of dairy cows and calves. Students will also observe Dr. King perform some basic cattle handling techniques (flight zone and point of balance) for approximately 30 min. This will occur after our animal handling lectures where students will learn low-stress handling techniques. Students will learn to monitor cow behaviour using live observations for 30 min as well as precision technology (such as their rumination/activity collars) from the barn computer (30 min).

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

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.

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.

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 5% each day they are delayed. 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 2 weeks 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 as a 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.

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.

LEARNER SUPPORT

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. 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

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

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

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

Student Discipline

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

- 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

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 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