ANSC*6440 - Advanced Critical Analysis in Applied Ethology
Fall 2024 Course Outline
Section: 01
Credits: 0.50

Land Acknowledgement: Guelph

The University of Guelph resides on the ancestral lands of the Attawandaron people and the treaty lands and territory of the Mississaugas of the Credit. We recognize the significance of the Dish with One Spoon Covenant to this land and offer respect to our Anishinaabe, Haudenosaunee and Métis neighbours. Today, this gathering place is home to many First Nations, Inuit, and Métis peoples and acknowledging them reminds us of our important connection to this land where we work and learn.

Calendar Description

Students explore the process of scientific inquiry and experimental design within the context of applied ethology research. Discussions include the peer review process, critical analyses and applications of methods for applied animal behaviour research.
Department(s): Department of Animal Biosciences

Course Description

This course is designed for graduate students interested in deepening their understanding of the mechanisms of animal behaviour, broadening their knowledge of the scientific literature and developing the skills necessary to critically analyze and conduct research in applied ethology. Students will explore the process of scientific inquiry and experimental design within the context of applied ethology research. Discussions include the peer review process and applications of methods for applied animal behaviour research. It is helpful if students have already completed a general course in animal behaviour

Lecture Schedule

Th 11:30am-2:20pm in ANNU*306 (9/5 to 12/13)

Instructor Information

Tina Widowski
Email: twidowsk@uoguelph.ca

Learning Resources

Required Class Resources
All lecture notes (slides), instructions for assignments, rubrics for assignments and required readings will be posted on the course website: Course link (Website) (https://courselink.uoguelph.ca/)

You will be expected to use scientific data bases (e.g. Google Scholar, PubMed, Web of Knowledge etc) to conduct your own literature searches. Make sure that you use only peer-reviewed journal articles for your written assignments.

Campus Resources

If you are concerned about any aspect of your academic program: Make an appointment with a Program Counsellor (https://www.uoguelph.ca/uaic/programcounsellors/) in your degree program. If you are struggling to succeed academically: There are numerous academic resources offered by the Learning Commons (https://www.lib.uoguelph.ca/using-library/spaces/learning-commons/) including, Supported Learning Groups for a variety of courses, workshops related to time management, taking multiple choice exams, and general study skills.

Course Learning Outcomes

1. Develop an appreciation for the breadth and depth of approaches used in applied ethology research by studying a variety of assigned and self-selected readings
2. Articulate the research question(s) and hypotheses of a published experimental study and determine whether the methods used in the study are sound and sufficient for testing the hypotheses
3. Search scientific literature about a specific behaviour system integrate the current knowledge to develop a model for the system and identify gaps in our understanding of it
4. Develop your own specific research question(s) and be able to design an experiment to answer that question
5. Review and critically evaluate a journal article in the format of a real peer review
6. Become familiar and comfortable with orally presenting your ideas to a group of peers and writing a well-crafted literature review for your instructor

Schedule of Topics and Assignments

Day	Date:	Topic	Activities	Due
Thu	9/5	NO CLASS	NO CLASS	
Thu	9/12	Introduction and course organization Why do we study animal behaviour?	Lecture/Discussion	
Thu	9/19	Asking questions about behaviour	Lecture: Research questions, objectives and hypotheses In-class exercise - Assignment 1 explained	
Thu	9/26	Asking questions about behaviour	Assignment 1 Student presentations and discussion	
Thu	10/3	Asking questions about behaviour	Assignment 1 Student presentations and discussion	
Thu	10/10	Answering questions about behaviour	Lecture: Experimental design and data collection In-class exercise - Assignment 2 explained	Assignment 1 Written Due in Dropbox
Thu	10/17	Answering questions about behaviour	Assignment 2 -Oral Student group presentations and discussion	
Thu	10/24	The peer review process	Lecture: Peer review of manuscripts for publication Assignment 3 explained	Assignment 2 Written Due in Dropbox
Thu	10/31	Conceptual models to explain behaviour	Lecture/Discussion Assignment 4 explained	Assignment 3 (p. 3) Due in Dropbox
Thu	11/7	Modeling a behavioural system	Assignment 4: Student presentations and discussion	
Thu	11/14	Modeling a behavioural system	Assignment 4: Student presentations and discussion	
Thu	11/21	Modeling a behavioural system	Assignment 4: Student presentations and discussion	
Thu	11/28	NO CLASS	NO CLASS	
Thu	12/5			Assignment 4 Written Due in Dropbox

Assessment Breakdown

Description	Weighting (%)	Due Date
Assignment 1 - Asking Questions - oral	5%	Sept 26 & Oct 3
Assignment 1- Asking Questions - written	10%	October 10
Assignment 2 - Answering Questions - oral Group mark	5%	October 17
Assignment 2 - Answering Questions - written	15%	October 24
Assignment 3 - Peer review of journal article	15%	October 31
Assignment 4 - A Model for Behaviour - oral	10%	November 7, 14 & 21
Assignment 4 - A Model for Behaviour - written	30%	December 5
In class discussion and peer marking	10%	NA

Assessment Details

Assignment

Assignment 1 - Asking Questions - oral   **5%**
Course Learning Outcomes Assessed: 1, 2, 6

Assignment 1 - Asking Qustions - written   **10%**
Course Learning Outcomes Assessed: 1, 3

Assignment 2 - Answering Questions - oral   **5%**
Course Learning Outcomes Assessed: 2

Assignment 2 - Answering Questions - written   **15%**
Course Learning Outcomes Assessed: 2, 3

Assignment 3 - Peer review of journal article   **15%**
Course Learning Outcomes Assessed: 5

Assignment 4 - A Model for Behaviour - oral   **10%**
Course Learning Outcomes Assessed: 2

Assignment 4 - A Model for Behaviour - written   **30%**
Course Learning Outcomes Assessed: 1, 3

Discussion

In class discussion and peer marking   **10%**
Course Learning Outcomes Assessed: 1, 2, 3, 6

Last Day to Drop Course

The final day to drop Fall 2024 courses without academic penalty is the last day of classes: November 29

After this date, a mark will be recorded, whether course work is completed or not (a zero is assigned for missed tests/assignments). This mark will show on the student's transcript and will be calculated into their average.

Course Grading Policies

Submission of Assignments

Slides of oral presentations and written assignments are to be deposted in CourseLink Dropbox by 12 pm (noon) on the due dates provided

Late Assignment

Please contact instructor at least 2 days in advance of due date if you are unable to complete an assignment

Course Standard Statements

The Use And Declaration Of AI And AI-Assisted Technologies

The use of AI in this course should only be used to support your learning experience, not replace your own intellectual work. Your engagement with the course content is crucial in fostering a rich learning environment and developing critical skills in research, critical thinking and writing.

We will be using the following policy for using AI technology excerpted from Elsevier Journals' guide to authors for publishing a scientific paper (Elsevier's AI policy for authors (https://www.elsevier.com/about/policies-and-standards/publishing-ethics/#4-duties-of-authors))**:**

Where students in this course use artificial intelligence (AI) and AI-assisted technologies in the writing process, they should:

- Only use these technologies to improve readability and language, not to replace key researcher tasks such as interpreting data or drawing scientific conclusions.
- Apply the technology with human oversight and control, and carefully review and edit the result, as AI can generate authoritative-sounding output that can be incorrect, incomplete or biased.
- Disclose in their written assignments the use of AI and AI-assisted technologies in the writing process by following the instructions below.

Disclosure instructions

Students must disclose the use of AI and AI-assisted technologies in the writing process by adding a statement at the end of their assignments. Use the following as a template for all written assignments.

'*Statement: During the preparation of this work the I used [NAME TOOL / SERVICE] in order to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.* This declaration should include the use of basic tools for checking grammar, spelling, references etc.'

Standard Statements for Graduate Courses

Academic Integrity

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy (https://calendar.uoguelph.ca/graduate-calendar/general-regulations/academic-misconduct/) is outlined in the Graduate Calendar.

Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required; however, interim accommodations may be possible while that process is underway.

Use of the SAS Exam Centre requires students to make a booking at least 10 business days in advance, and no later than the first business day in November, March or July as appropriate for the semester. Similarly, new or changed accommodations for online quizzes, tests and exams must be approved at least a week ahead of time. For students at the Guelph campus, information can be found on the SAS website. (https://www.uoguelph.ca/sas/)

Accommodation of Religious Obligations

If you are unable to meet an in-course requirement due to religious obligations, please email the course instructor within two weeks of the start of the semester to make alternate arrangements.

See the Academic calendar for information on regulations and procedures for Academic Accommodation of Religious Obligations (https://calendar.uoguelph.ca/graduate-calendar/general-regulations/academic-accommodation-religious-obligations/)

Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Drop Date

Courses that are one semester long must be dropped by the end of the last day of classes; two-semester courses must be dropped by the last day of classes in the second semester. The regulations and procedures for Dropping Courses (https://calendar.uoguelph.ca/graduate-calendar/general-regulations/registration/) dropping courses are available in the Graduate Calendar (https://calendar.uoguelph.ca/graduate-calendar/general-regulations/registration/).

Email Communication

As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

Health and Wellbeing

The University of Guelph provides a wide range of health and wellbeing services at the Vaccarino Centre for Student Wellness (https://wellness.uoguelph.ca/). If you are concerned about your mental health and not sure where to start, connect with a Student Wellness Navigator (https://wellness.uoguelph.ca/navigators/) who can help develop a plan to manage and support your mental health or check out our mental wellbeing resources. (https://wellness.uoguelph.ca/shine-this-year/) The Student Wellness team are here to help and welcome the opportunity to connect with you.

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

Recording of Materials

Presentations that are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a student, or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources

The Academic Calendars (http://www.uoguelph.ca/registrar/calendars/?index) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the Graduate Calendar for information on regulations and procedures for Academic Consideration (https://calendar.uoguelph.ca/graduate-calendar/general-regulations/grounds-academic-consideration/).