UNIVERSITY of GUELPH

ANSC*6440 Advanced Critical Analysis in Applied Ethology

Fall 2021
Section(s): C01

Department of Animal Biosciences
Credit Weight: 0.50
Version 1.00 - September 08, 2021

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1 Course Details

1.1 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.

1.2 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.

1.3 Timetable

Classes meet every Friday from 10:30 to 1:20 in 030 ANNU

COVID-19 Disclaimer: please be aware that the information on course delivery, accessibility and examinations presented in this outline were developed based on current University guidelines. However, due to the continuously evolving situation and resulting changes in public health recommendations, the format and delivery of this course may be revised with limited notice.

1.4 Final Exam

There is no final exam for this course

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2 Instructional Support

2.1 Instructional Support Team

Instructor:	Tina Widowski
Email:	twidowsk@uoguelph.ca
Office Hours:	Office hours - Friday after class (1:30 - 2:30) or by appointment

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3 Learning Resources

3.1 Required Resources

Course readings will be posted or linked on Courselink (Readings)

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.

3.2 Additional Resources

Bateson, M. and P. Martin (2021) Measuring Behaviour : An Introductory Guide 4th Edition. Cambridge University Press. (Readings)
https://www.cambridge.org/ca/academic/subjects/life-sciences/animal-behaviour/measuring-behaviour-introductory-guide-4th-edition?format=PB&isbn=9781108745727
A handy little book to own if you have the inclination

Course Technologies (Other)

1. **CourseLink**

This course is being offered using CourseLink (powered by D2L's Brightspace), the University of Guelph's online learning management system (LMS). By using this service, you agree to comply with the University of Guelph's Access and Privacy Guidelines. Please visit the D2L website to review the Brightspace privacy statement and Brightspace Learning Environment web accessibility standards.

- http://www.uoguelph.ca/web/privacy/ https://www.d2l.com/legal/privacy/
- https://www.d2l.com/accessibility/standards/

Technical Support

If you need any assistance with the software tools or the CourseLink website, contact CourseLink Support.

Email: courselink@uoguelph.ca

Tel: 519-824-4120 ext. 56939 Toll-Free (CAN/USA): 1-866-275-1478

Support Hours (Eastern Time):

Monday thru Friday: 8:30 am–8:30 pm

Saturday: 10:00 am–4:00 pm

Sunday: 12:00 pm–6:00 pm

1. **Zoom**

This course will use Zoom for lectures, if necessary. Check your system requirements to ensure you will be able to participate.

- https://opened.uoguelph.ca/student-resources/system-and-software-requirements

iii. Dropbox Submissions

Assignments should be submitted electronically via the online Dropbox tool. When submitting your assignments using the Dropbox tool, do not leave the page until your assignment has successfully uploaded. To verify that your submission was complete, you can view the submission history immediately after the upload to see which files uploaded successfully. The system will also email you a receipt. Save this email receipt as proof of submission.

Be sure to keep a back-up copy of all of your assignments in the event that they are lost in

transition. In order to avoid any last-minute computer problems, your instructor strongly recommends you save your assignments to a cloud-based file storage (e.g., OneDrive), or send to your email account, so that should something happen to your computer, the assignment could still be submitted on time or re-submitted.

It is your responsibility to submit your assignments on time as specified on the Schedule. Be sure to check the technical requirements and make sure you have the proper computer, that you have a supported browser, and that you have reliable Internet access. Remember that technical difficulty is not an excuse not to turn in your assignment on time. Don't wait until the last minute as you may get behind in your work.

If, for some reason, you have a technical difficulty when submitting your assignment electronically, please contact your instructor or CourseLink Support.

- http://spaces.uoguelph.ca/ed/contact-us/

3.3 Technical Skills

Technical Skills

As part of your learning experience, you are expected to use a variety of technologies for assignments, lectures, teamwork, and meetings. In order to be successful in this course you will need to have the following technical skills:

- Manage files and folders on your computer (e.g., save, name, copy, backup, rename, delete, and check properties);
- Install software, security, and virus protection;
- Use office applications (e.g., Word, PowerPoint, Excel, or similar) to create documents;
- Be comfortable uploading and downloading saved files;
- Communicate using email (e.g., create, receive, reply, print, send, download, and open attachments);
- Navigate the CourseLink learning environment and use the essential tools, such as Dropbox, Quizzes, Discussions, and Grades (the instructions for this are given in your course);
- Access, navigate, and search the Internet using a web browser (e.g., Firefox, Internet Explorer); and
- Perform online research using various search engines (e.g., Google) and library

databases.

3.3 Remote Library Access

Remote Library Access

As a student, you have access to the University of Guelph's library collection, including both physical and electronic materials. For information on checking out or couriering physical library items, accessing electronic journals and returning items to the library, visit the library's website.

If you are studying off campus and would like to access the library's electronic resources, use the Off Campus Loginand login using your Single Sign On credentials or using your last name and library barcode.

- https://www.lib.uoguelph.ca/
- https://www.lib.uoguelph.ca/campus-login

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4 Learning Outcomes

4.1 Course Learning Outcomes

By the end of this course, you should be able to:

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

4.2 Course Objectives

- To provide opportunities for in-depth analysis and discussion of classic papers and current topics in applied ethology
- To explore experimental design and data collection methods used in behaviour research
- To provide experience presenting and reviewing research articles
- To develop skills in critical evaluation of research in applied ethology

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5 Teaching and Learning Activities

5.1 Lecture

Fri, Sep 10

Topics:	Introduction and course organization

Why do we study animal behaviour?

Fri, Sep 17

Topics:	"Asking questions about behaviour"

- Lecture:*Questions, objectives and hypotheses*

In-class exercise - Assignment 1

Fri, Sep 24

Topics:	"Asking questions about behaviour"

- Student presentations and discussion (3)

Fri, Oct 1

    Topics: "Asking questions about behaviour"

- Student presentations and discussion (4)

Fri, Oct 8

    Topics: "Asking questions about behaviour"

- Student presentations and discussion (4)

Fri, Oct 15

    Topics: Answering questions about behaviour"

- Lecture:*Experimental design and data collection*

In-class exercise - Assignment 2

Fri, Oct 22

    Topics: "Answering questions about behaviour"

- Student presentations and discussion (3)

Fri, Oct 29

    Topics: "Answering questions about behaviour"

- Student presentations and discussion (2)

Fri, Nov 5

    Topics: "The peer review process"

- Lecture:*Peer review of manuscripts for publication*

Assignment 3

Fri, Nov 12

    Topics: "Conceptual models to explain behaviour"

                 - Lecture and discussion of assigned readings

                 - Assignment 4

Fri, Nov 19

    Topics: "Modeling a behavioural system"

                Student presentations and discussion

Fri, Nov 26

    Topics: "Modeling a behavioural system"

                Student presentations and discussion

TBD

    Topics: "Modeling a behavioural system"

                Student presentations and discussion

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6 Assessments

6.1 Marking Schemes & Distributions

Name	Scheme A (%)
Asking questions about animal behaviour	15
Answering questions about animal behaviour	20

Name	Scheme A (%)
Peer Review of Journal Article	15
Modelling a behaviour system	40
Participation in Discussion	10
Total	100

6.2 Assessment Details

Asking questions about animal behaviour (15%)
Date: Thu, Oct 15
Learning Outcome: 1, 2, 6
Oral presentation due date TBD

Answering questions about animal behaviour (20%)
Date: Fri, Nov 5
Learning Outcome: 1, 2, 6
Oral presentation due date TBD

Peer Review of Journal Article (15%)
Date: Fri, Nov 12
Learning Outcome: 5

Modelling a behaviour system (40%)
Date: Fri, Dec 10
Learning Outcome: 3, 4, 6
Oral presentation due date TBD

Participation in Discussion (10%)
Learning Outcome: 6
This mark will be based on your weekly participation in discussions- i.e. asking or posting questions on the 'chat' during class lectures and discussions.

6.3 Grades and Feedback

Grades and Feedback

Unofficial assessment marks will be available in the **Grades** tool of the course website.

Your instructor will attempt to have grades posted online within 2 weeks of the submission deadline, if the assignment was submitted on time. Once your assignments are marked you can view your grades on the course website by selecting **Grades** from the **Tools** dropdown menu on the navbar. Your course will remain open to you for seven days following the last day of the final exam period.

University of Guelph students can access their final grade by logging into WebAdvisor (using your U of G central ID).

- https://webadvisor.uoguelph.ca

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7 Course Statements

7.1 Grading Policies

Detailed marking schemes and/or rubrics will be posted in Courselink in advance of all assignment due dates. Please refer to them when preparing your assignments.

If I find that you had difficulty in meeting the learning outcomes for written Assignments 1 and 2 (i.e. poor mark), I will provide feedback and give you the opportunity to redo the assignment.

This course meets only once per week and therefore it is advised that you attend all classes. If you are unable to attend a class because of a conflict, please notify me by email.

7.2 Recording Materials

Recording 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, or a student. Material recorded with permission is restricted to use for that course unless further permission is granted

7.3 Netiquette Expectations

Netiquette Expectations

The course website is considered the classroom and the same protections, expectations, guidelines, and regulations used in face-to-face settings apply. Inappropriate behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students;
- Using obscene or offensive language online

- Copying or presenting someone else's work as your own;
- Adapting information from the Internet without using proper citations or references;
- Buying or selling term papers or assignments;
- Posting or selling course materials to course notes websites;
- Having someone else complete your quiz or completing a quiz for/with another student;
- Stating false claims about lost quiz answers or other assignment submissions;
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors, and/or TAs;
- Using the course website to promote profit-driven products or services;
- Attempting to compromise the security or functionality of the learning management system; and
- Sharing your username and password
- Recording lectures without the permission of the instructor

7.4 Compliance with Covid-19 Safety Protocols

Please note that pandemic restrictions in place at the time of each lecture / lab must be followed by everyone according to the guidelines provided by the University and the local public health unit. The pandemic is a community problem and we all need to actively participate in a community solution. Restrictions may include but not be limited to a vaccination requirement, proper use of appropriate PPE, hand sanitation, social distancing and other measures. Failure to comply with restrictions that are in place at the time of the lecture / lab could result in the immediate cancelation of that lecture / lab. Students would still be responsible for learning the material that was to be covered in that lecture / lab regardless of the cancelation.

8 University Statements

8.1 Email Communication

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

8.2 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. The grounds for Academic Consideration are detailed in the Undergraduate and Graduate Calendars.

Undergraduate Calendar - Academic Consideration and Appeals

https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Graduate Calendar - Grounds for Academic Consideration
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

Associate Diploma Calendar - Academic Consideration, Appeals and Petitions
https://www.uoguelph.ca/registrar/calendars/diploma/current/index.shtml

8.3 Drop Date

Students will have until the last day of classes to drop courses without academic penalty. The deadline to drop two-semester courses will be the last day of classes in the second semester. This applies to all students (undergraduate, graduate and diploma) except for Doctor of Veterinary Medicine and Associate Diploma in Veterinary Technology (conventional and alternative delivery) students. The regulations and procedures for course registration are available in their respective Academic Calendars.

Undergraduate Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml

Graduate Calendar - Registration Changes
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/genreg-reg-regchg.shtml

Associate Diploma Calendar - Dropping Courses
https://www.uoguelph.ca/registrar/calendars/diploma/current/c08/c08-drop.shtml

8.4 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.

8.5 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.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance and not later than the 40th Class Day.

For Guelph students, information can be found on the SAS website

https://www.uoguelph.ca/sas

For Ridgetown students, information can be found on the Ridgetown SAS website
https://www.ridgetownc.com/services/accessibilityservices.cfm

8.6 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 encourages academic integrity. 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.

Undergraduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml

Graduate Calendar - Academic Misconduct
https://www.uoguelph.ca/registrar/calendars/graduate/current/genreg/index.shtml

8.7 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.

8.8 Resources

The Academic Calendars are the source of information about the University of Guelph's procedures, policies, and regulations that apply to undergraduate, graduate, and diploma programs.

Academic Calendars
https://www.uoguelph.ca/academics/calendars

8.9 Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of

course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email.

This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

8.10 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).

8.11 Covid-19 Safety Protocols

For information on current safety protocols, follow these links:

- https://news.uoguelph.ca/return-to-campuses/how-u-of-g-is-preparing-for-your-safe-return/
- https://news.uoguelph.ca/return-to-campuses/spaces/#ClassroomSpaces

Please note, these guidelines may be updated as required in response to evolving University, Public Health or government directives.

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