



ANSC*6440 Advanced Critical Analysis in Applied Ethology

Fall 2019
Section(s): C01

Department of Animal Biosciences
Credit Weight: 0.50
Version 1.00 - September 04, 2019

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 11:30 to 2:20 in ANNU Room 101

1.4 Final Exam

There is no final exam for this course

2 Instructional Support

2.1 Instructional Support Team

Instructor: Tina Widowski
Email: twidowsk@uoguelph.ca
Telephone: +1-519-824-4120 x52408
Office: ANNU 246

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 reviews. Make sure that you use only peer-reviewed journal articles for your written assignments.

3.2 Additional Resources

Martin, P. and Bateson, P. (2007) Measuring Behaviour and Introduction 3rd Edition. Cambridge University Press. (Readings)

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 6

Topics: Introduction and course organization

Why do we study animal behaviour?

Fri, Sep 13

Topics: "Asking questions about behaviour"

- Lecture: Questions, objectives and hypotheses

In-class exercise - Assignment 1

Fri, Sep 20

Topics: "Asking questions about behaviour"

- Student presentations and discussion (6)

Fri, Sep 27

Topics: "Asking questions about behaviour"

- Student presentations and discussion (5)

Fri, Oct 4

Topics: "Asking questions about behaviour"

- Student presentations and discussion (5)

Fri, Oct 11

Topics: Answering questions about behaviour"

- Lecture:Experimental design and data collection

In-class exercise - Assignment 2

Fri, Oct 18

Topics: "Answering questions about behaviour"

- Student presentations and discussion (4)

Fri, Oct 25

Topics: "Answering questions about behaviour"

- Student presentations and discussion (4)

Fri, Nov 1

Topics: "The peer review process"

- Lecture:Peer review of manuscripts for publication

Assignment 3

Fri, Nov 8

Topics: "Conceptual models to explain behaviour"

- Lecture and discussion of assigned readings
- Assignment 4

Fri, Nov 15

Topics: "Modeling a behavioural system"

Student presentations and discussion

TBD

Topics: "Modeling a behavioural system"

Student presentations and discussion

TBD

Topics: "Modeling a behavioural system"

Student presentations and discussion

6 Assessments

6.1 Assessment Details

Asking questions about animal behaviour (15%)

Date: Fri, Oct 11

Learning Outcome: 1, 2, 6

Oral presentation due date TBD

Answering questions about animal behaviour (20%)

Date: Fri, Nov 1

Learning Outcome: 1, 2, 6

Oral presentation due date TBD

Peer Review of Journal Article (15%)

Date: Fri, Nov 8

Learning Outcome: 5

Modelling a behaviour system (40%)

Date: Fri, Dec 6

Learning Outcome: 3, 4, 6

Oral presentation due date TBD

Participation in Discussion (10%)

Learning Outcome: 6

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 in writing.

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>
