# BIOD53 - Special topics in Animal Behaviour\*

Instructor: Luciana Baruffaldi

Email: l.baruffaldi@utoronto.ca **Lectures**: Mondays 15:00 – 17:00 **Tutorials**: Wednesdays 15:00 – 17:00 **Office Hours:** Fridays 14:00 – 16:00

#### **COURSE OVERVIEW**

It is my pleasure to welcome you to BIOD53, Special topics in Animal Behaviour. The field of Animal Behaviour uses developmental, ecological and evolutionary perspectives to produce a predictive framework for understanding the evolution and maintenance of the behaviour of animals in their natural context. This is a class intended to get you on track in the field of animal behaviour. Many of the skills we will teach in this course will be related to critical thinking, presentation of your ideas and work, as well as to analyze and understand the work done by peers in topics of Animal Behaviour.

# **Learning Objectives**

- 1) Develop your ability to identify, answer, and communicate questions in any area of scientific inquiry
- 2) Develop your ability to access, evaluate, and interpret factual information from a variety of sources, and use information to make inferences in the context of hypothesis testing.
- 3) Develop your ability to read and interpret papers from the primary literature.

#### **COURSE MATERIALS**

All essential course information will be posted to Quercus

**Readings -** There is no assigned text for this course. Instead, we will be drawing extensively on primary literature papers. Citation information/DOI's for the papers we will be reading will be posted on Quercus.

(\*modified from Winter syllabus by Sean McCann, Malcolm Rosenthal and Maydianne C.B Andrade)

**Lecture Slides -** For your reference, lecture slides will be posted to Quercus the day after the lecture as pdf files. It is your responsibility to take notes, engage with the materials, and ask questions in class to clarify whenever it would help your understanding. Most lecture slides will focus on diagrams, figures, and other images. As such, do not depend on lecture pdf's for your note taking.

#### **COURSE FORMAT**

**'Foundation lectures'**. Each week there will be 1- 2hr of providing background and theoretical framework in a given area. *These sessions are intended to be interactive*, with questions, discussion, and challenges encouraged. Some lecture sessions may be used for student presentations.

**Tutorials.** Tutorial sessions will feature discussions, peer-group problem solving, and student presentations on primary literature papers in the area covered in the foundation lectures of the previous week. Other tutorial activities may include debates, peer review sessions, and/or information/practice sessions on relevant practical tools for the writing assignments.

**Workshops**. This class will function as a facilitated work session during which you will make progress on your assignments with feedback available from myself, the TA and your peers.

#### **ASSIGNMENTS**

This is a brief overview of the required assignments in this class. Further information regarding expectations and grading outlines will be provided in class or on blackboard.

# Oral Paper presentation and follow up research experiment

Once this term, you will be required to present a seminar based on a primary literature paper (i.e., a first-hand report of a scientific study, not a review) to the class. In addition, you will need to present and propose a follow up experiment, that will also need to be written in one-page assignment and email it to me the same day of the presentation. These oral presentations will follow the format of research presentations given at scientific conferences. The presentation and the written assignment will be marked separately. A list of potential papers, related to lecture topics, will be provided. Students will sign up for a topic and present one of

the papers listed, or choose a relevant paper they find on their own. Citation information for the paper to be presented and a pdf must be emailed to me at least 1 week prior to the presentation.

# Paper presentations should be approximately 30 min long, and should have three main goals:

- (1) bring the whole class 'up to speed' on hypotheses, procedures and conclusions of the study (this may require filling in background information not likely to be common knowledge and so may require consulting other papers).
- (2) highlight where the paper links to theory and general principals of Animal Behaviour.
- (3) field questions and facilitate discussion on the paper and topic.
- The Centre for Teaching and Learning gives help on presentation skills, if you may benefit from these, consult their website (<a href="http://ctl.utsc.utoronto.ca/ac/students">http://ctl.utsc.utoronto.ca/ac/students</a>) More details on this assignment will be given in tutorial.
- Audience responsibilities: Everyone must read the papers that will be presented in tutorial prior to class and be prepared to ask 3 questions and participate in discussions during class. The role of the audience is to provide an attentive, receptive, but critical response to the material presented.

# Follow up experiment presentation should be approximately 20 min long, and should include: relevant background information to introduce new proposed study, objective and hypothesis, and a description about how you are planning to conduct the experiment (methods). According with you question and hypothesis you will need to talk about your predictions and the impact of the proposed study in the field of Animal Behaviour.

# Research Proposal

You will write an 8-page (double-spaced) research proposal on a topic of your choice. Your proposal will be written following the Student Grant application from the Animal Behavior Society. To help focus your writing, you will choose a (real life) researcher working in an area of interest and write the proposal as if you were

seeking funding to work in their lab. Your proposal will identify a problem, hypothesis, predictions, study organism and the methodology or technique to be used, and explain the importance of the focal problem and your work.

As is best practice for researchers seeking grants, you will have multiple opportunities to get feedback before handing in your proposal at the end of term. You will get feedback from the TA and from a *peer* on your first draft (due TBA, required), and you have the option of getting feedback from me on your second draft (optional). TA will mark your final proposal submitted via Turnitin.com with the standard expectations for original writing (due at the end of term). More details will be given in tutorial.

#### Final Exam

There is no midterm in this course. The final exam will be comprehensive and include short-answer, hypothesis testing, and essay-style questions. Final exams will be submitted via Turnitin.com with the standard expectations for original writing.

### **Grading and Assessment**

## Assignments, participation and final exam.

Item	Percentage of grade
Participation*	5
Research grant proposal	25
Presentation & follow-up experiment paper	25
Peer review + paper questions	10
Final exam	35

# **Participation**

*Prepared attendance and participation in all classes are mandatory.* A small class is nice because of the interaction it allows, but a rewarding experience depends on your full engagement. Your participation score will decrease proportionately with the number of classes in which you do not participate. You may miss 3 classes without penalty if a valid excuse (documentation) is provided. Valid excuses are as outlined in the university's policy for missing exams and

include illness, family crisis, etc. If you must miss more than 3 classes, contact me to agree on alternative arrangements for this portion of your mark.

Discussions in this class may include topics that are politically or emotionally charged for some people. Students are reminded that all interactions (in class and online) must be consistent with the <u>University's Code of Student Conduct</u>. While all academic inquiries and discussion are welcome, only respectful discourse will be tolerated.

#### **COURSE POLICIES & ADMINISTRATION**

#### **AccessAbility**

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. We will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in AA142) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca

# **Academic Integrity**

Academic integrity is one of the cornerstones of the University of Toronto. According to the University of Toronto's <u>Code of Behaviour on Academic Matters</u>, which all students are expected to know and respect, it is an offence:

- To use the words or ideas of another person without citing the source (Plagiarism)
- To have someone else do the work for you (Unauthorized Assistance)

There are other offences covered under the Code, but these are by far the most common that apply in this course. Please respect these rules and the values which they protect. If you are not sure what constitutes plagiarism, see:

www.utoronto.ca/academicintegrity or www.writing.utoronto.ca/advice/using-sources.

#### Late Assignments

Students who are unable to submit an assignment on time due to illness or other

extenuating circumstances should contact me within 3 working days of the deadline. Students must then present me a completed UTSC medical certificate that confirms their illness and medical attention at the time specified. If the medical excuse is valid, no late penalty will be assessed for the assignment.

#### Contact

The easiest way to get feedback or assistance outside of class will be to visit me during my office hours, or to send me an email. I will do my best to respond to emails the same day if they are sent between 9:00 and 5:00 on a weekday. Emails sent after 5:00 on a weekday may not get answered until the next day, and emails sent over the weekend may not get answered until that Monday.

#### **Tentative schedule**

Date	Lectures: Monday 3 – 5 pm	Date	Tutorials: Wednesday 3 - 5 pm
May 11	<ul><li>Intro to class</li><li>Syllabus and assignments</li></ul>	May 13	<ul> <li>Workshop: How to present and to lead a paper discussion.</li> <li>Follow up experiments</li> </ul>
May 18	Victoria day	May 20	Workshop:     Hypothesis testing
May 25	Animal communication     I: signal diversity	May 27	Workshop: How to write a successful grant
June 1	Animal communication     II: individual variation	June 3	Paper discussion
June 8	Sexual selection I: male competition and male choice	June 10	Workshop: Grant application
June 15	Sexual selection II:     female choice and     antagonistic coevolution	June 17	Paper discussion

June 22	Invited speaker     Dra. Anita Aisenberg	June 24	Reading week
June 29	Presidential days	July 1	Canada day
July 6	Predation/Syndromes	July 8	Paper discussion
July 13	Life history and plasticity	July 15	Paper discussion
July 20	<ul> <li>Invited speaker         Dra. Maydianne         Andrade     </li> </ul>	July 22	Workshop: Grants     application
July 27	<ul> <li>Social behaviour and personalities</li> </ul>	July 29	Paper discussion
August 3	Civic holiday	August 6	TBA Invited speaker
August	Final lecture: Course		
10	overview		
August ?	Final exam	•	