Psychology 4R03-Special Topics in Animal Behaviour

Time: Mondays 14:30-17:20
Dates: January 6 - April 6, 2020

Location: Psych 204
Instructor: Dr. Sigal Balshine Ext – 23024, TA: Matt Salena Ext: 27036

Dr. Balshine’s Contact Info: Office - PC 309, Email - sigal@mcmaster.ca
Office Hours: Monday:13:30-14:30 or by appointment

TA: Office - PC 152 Email: salenamg@mcmaster.ca
Office Hours - Tuesday: 12:30-13:30 or by appointment

Web page: Psych 4R03 on Avenue to Learn

Course description and objectives: In this advanced 4th year seminar course we will explore the topics of conflict and cooperation in animal behaviour. This is a discussion-based course drawing on foundations presented in Psych 2TT3, 3S03, 3T03, and 3F03. The course assumes a working knowledge of animal behavior, evolution and the process of adaptation. Some of you will have additional background from advanced courses in other areas. We will consider how and why cooperation exists in a competitive world and will explore evolutionary explanations for how and why individuals do and but sometimes do not manage to get along with strangers and relatives. We will investigate these topic by using the relevant theories and empirical research in animal behaviour and integrating approaches from evolutionary biology, psychology, anthropology, and economics.

It is your responsibility to ensure that you have met all prerequisites listed in the McMaster calendar for this course. If you lack any prerequisites for this course, the Department may cancel your registration at any time.

Goals of the Course: 1) gain a deeper understanding of the field of Animal Behaviour; 2) develop your critical thinking skills and 3) improve your science communication skills. To achieve these goals we will use the literature to explore the ways in which theories of cooperation and conflict in animal behaviour are developed and hypotheses are tested. You will be provided with ample opportunities to read primary sources, contribute to class discussion, work in small groups (2-4 people), make presentations, and practice your writing and verbal communication skills. The seminar format demands a free, interactive exchange and evaluation of ideas. You will be expected to discuss your own ideas, those of your colleagues, and those you find in readings. I also expect that by the end of the course you will have gained a better appreciation for how research is conducted and designed.

Course Organization: Classes will consist of student led discussion of the assigned papers, mini lectures (~20 minutes) given by the course instructor, in class exercises, field trips, some guest lecturers and group work. In the first first half of the course we will build various knowledge and skills and in the second half of the course you will be using the skills and knowledge to delve deeper and work collaboratively on group projects.
Assignments, Evaluation and Grades: Final grades will be based on the presentations, summaries and questions based on the assigned readings, a midterm lab report, a group project as well as class participation. There will be no final exam in this course.

Breakdown of Grades
Weekly homework assignments (done individually): 5% each (we will use best 2 marks) = 10%
Oral Paper Presentation = 10%
Midterm Lab Report (done individually) = 20%
Oral Lecture Presentation (group project) = 20%
Written Lecture Material/ Research Project = 20%
Participation and Contributions to class discussion = 20%
Total = 100%

Note. Extensions will not be offered. Late assignments will not be accepted.

Assigned Paper and Presentations: A number of papers will be discussed in class. Everyone is required to read the assigned papers weekly. The weekly homework assignments will be to read the assigned papers for that week and prepare a 1 paragraph synopsis plus 1 question for each paper. Once in the first half of the course, you will be asked to present one of these papers to the class. You will be asked to review this paper by making a 15 minute conference like presentation, taking the perspective of the lead researcher. You need to present the work as if it were your own study. Because your classmates have also read and summarized the paper and prepared a question we will hopefully have good discussion. These paragraphs and questions should be submitted to the course dropbox prior to class each week. Paper presentaters will be marked for their presentations and the 1 paragraph summary plus the associated question will also be marked. Only the best two will count for credit.

Lab Report: We will be having a field trip probably to the RBG to observe animal behaviour. We will collect data as a class and you will be responsible for designing the experiment, analyzing the data and writing it up. This lab write up will count as your main midterm assessment.

Final Group Projects: Before reading week (~ end of January) you will be divided into groups of 2-4 students and given a topic to research and build a lecture around. Groups will be given time in class to work on this project. Each group of students will develop a lecture with a formal powerpoint or keynote presentation, plus write up a formal report on the topic. You will have lots of scope to personalize your lecture within the broad topic assigned. The lecture should include time for an in-class exercises that reinforcour the concepts or theories presented in the lecture or learning assessment exercises. Each member of the group is expected to participate in the lecture and groups will receive 50 minutes to present their findings and give their lecture. The lecture presentations should cover main concepts and content associated with the research topic but also need to be engaging and maintain the viewers' attention without compromising the viewers' understanding. All group members must participate equally in the lecture. Lectures will be assessed by other students in the class and by the instructor and TA as well. Each member of the class not involved in the lecture will be expected to provide feedback, constructive criticism, suggestions for improvement etc. The groups will receive this feedback.

Discussion/Participation: This is a 4th year capstone seminar course. Regular discussion and participation in every class is expected.
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<tr>
<th>Class</th>
<th>Date</th>
<th>Module Title</th>
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<tbody>
<tr>
<td>1.</td>
<td>January 6</td>
<td>Course Introduction&lt;br&gt;Mini Lecture 1: Tinbergen’s Four questions&lt;br&gt;In Class Exercise: Proximate/Ultimate Explanations&lt;br&gt;Break&lt;br&gt;Mini Lecture 2: How to observe, describe &amp; measure behaviour&lt;br&gt;Ethogram construction&lt;br&gt;In Class Exercise: Presentation Tips</td>
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<td>2.</td>
<td>January 13</td>
<td>Paper 1. Presentation &amp; Discussion&lt;br&gt;Field Trip and Project Planning&lt;br&gt;Mini Lecture 3. The Evolution of Conflict&lt;br&gt;Guest Lecture</td>
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<td>3.</td>
<td>January 20</td>
<td>Field Trip to the RBG</td>
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<td>5.</td>
<td>February 3</td>
<td>Paper 4. Presentation &amp; Discussion&lt;br&gt;Mini Lecture 5: Competitive Interactions&lt;br&gt;Guest Lecture&lt;br&gt;Midterm: Lab Report Due</td>
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<td>6.</td>
<td>February 10</td>
<td>Paper 5. Presentation &amp; Discussion&lt;br&gt;Mini Lecture 6: Cooperative Interactions&lt;br&gt;Guest Lecture&lt;br&gt;Final Project Assignment and Planning</td>
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<td>7.</td>
<td>February 17</td>
<td>No class (Reading Week)</td>
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<td>8.</td>
<td>February 24</td>
<td>Paper 6. Presentation &amp; Discussion&lt;br&gt;Group meeting in class&lt;br&gt;In Class Exercise: Job/Interview Skills and Graduate School Speed Dating</td>
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<td>9.</td>
<td>March 2</td>
<td>Paper 7. Presentation &amp; Discussion&lt;br&gt;Group meeting in class</td>
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<td>10.</td>
<td>March 9</td>
<td>Paper 8. Presentation &amp; Discussion&lt;br&gt;Mini Lecture 7 Animal Personality and Cooperation&lt;br&gt;Guest Lecture</td>
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Class 11.  March  16  Paper 9.  Presentation & Discussion  
Group meeting in class

Group meeting in class

Class 13.  March 30  Group meeting in class

Class 14.  April 6  Class presentations

Readings


