Animal Behaviour (2TT3)

Instructor: Dr. Brett Beston (bestonbr@mcmaster.ca)
Office Hour: TBD

Course Outline:
Introduction to animal learning and behaviour will discuss the major classes of behaviour shared by most animals including humans. We will learn how natural selection, learning theory, and cultural transmission shape animal behaviour in fascinating ways. By the end of the course, students will understand the importance and uses of studying animal behaviour and apply scientific thinking for analysing novel problems of animal behaviour.

Course Objectives:
By the end of this course, the students will:
1. Understand the importance and uses of animal behaviour research
2. Discuss the two mechanisms that can change behaviour over time
3. Describe the physiological mechanisms that control and generate behaviour
4. Apply scientific thinking for analyzing novel problems in animal behaviour
5. Detail the major components of behaviour, which are shared by most animal species
6. Explain human behaviour based on concepts and examples studied in the course
7. Interpret graphs and know how to draw graphs from data

Course Materials
Dugatkin, L.A. 2009 Principles of animal behaviour. 2nd ed
All students are expected to read the relevant chapters in the textbook, which will supplement the lectures. Additional material may be provided on the course web page
Course Evaluation:

**Term tests**
Term test will be held during class time. *Please note - There will be no make up tests given.* Students that miss an exam must contact their faculty office. The faculty office will inform us directly about students with legitimate issues. At such time, the weight of that test will be added to your final exam.

**Final examination**
The final examination will be held during the examination period at the end of the semester

<table>
<thead>
<tr>
<th>Evaluation breakdown</th>
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<tbody>
<tr>
<td><strong>Term tests</strong></td>
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<tr>
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<tr>
<td><strong>Final examination</strong></td>
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**Course Policies:**
Details of the course requirements may change. If it becomes necessary to make changes to some part of the course during the term, reasonable notice and communication will be provided between the students and lecturer. Updates will be discussed in class and will be posted on the class web page.

The instructor reserves the right to scale the final marks up or down depending on an individual’s overall performance based on special circumstances.

**Scaling:**

\[
\begin{align*}
\text{A+} &= 90-100 \\
\text{B+} &= 77-79 \\
\text{C+} &= 67-69 \\
\text{D+} &= 57-59 \\
\text{F} &= 0-49 \\
\text{A} &= 85-89 \\
\text{B} &= 73-76 \\
\text{C} &= 63-66 \\
\text{D} &= 53-56 \\
\text{A-} &= 80-84 \\
\text{B-} &= 70-72 \\
\text{C-} &= 60-62 \\
\text{D-} &= 50-52 \\
\end{align*}
\]

*Final marks may be adjusted up or down on an individual basis, in light of special circumstances and or the student’s overall performance in the course*

**Academic Integrity**
You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at [http://www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity)
<table>
<thead>
<tr>
<th>Lecture</th>
<th>Topic</th>
<th>Book Chapter</th>
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Research approaches                      | 3            |
| 2       | Principles of animal behaviour                                        | 1            |
| 3       | Evolution                                                            | 2            |
| 4       | Evolution                                                            | 2            |
| 5       | Learning                                                             | 4 Test 1     |
| 6       | Learning                                                             | 5            |
| 7       | Learning                                                             |              |
| 8       | Case Study: Evolutionary biology of bird song                         |              |
| 9       | Life history; foraging                                               | 10 Test 2    |
| 10      | Fleeing - anti-predatory behaviour                                    | 11           |
| 11      | Fighting and cooperation                                             | 14           |
| 12      | Sex                                                                  | 6            |