

Course ID: **ECOL 383**

Credits: 3

Course Name: **Animal Behaviour**

Prerequisites:

BIO 131, BIO 133

| Class Information | | Instructor Information | | First day of classes: | Wed., Jan. 06, 2016 |
|-------------------------------------|----------------|------------------------|----------------------|---|---|
| Days: | TU / TH | Instructor: | Graeme Gissing | Last day to add/drop, or change to audit: | Sun., Jan. 17, 2016 |
| Time: | 9:45-11:00 | Email: | ggissing@ambrose.edu | Last day to request revised exam: | Mon., Feb. 29, 2016 |
| Room: | A2212 | Phone: | 403-410-2000 x 5940 | Last day to withdraw from course: | Fri., Mar. 18, 2016 |
| Lab: | FR: 12:30-3:30 | Office: | G2204 | Last day to apply for time extension for coursework: | Tue., Mar. 29, 2016 |
| Room: | A2151 | | | Office Hours: | Tuesdays, 12:00 - 1:00 and anytime by appointment |
| FINAL EXAM: | | | | | |
| Date: Monday, April 18, 2016 | | | | | |
| Time: 9:00 AM | | | | | |
| Room: A2210 | | | | | |

Textbook:

This course will not have a textbook. Students will read and discuss a series of journal articles, participate in the evaluation and design of experiments in animal behaviour, and rely on lecture materials.

Course Description:

This course introduces the topic of animal behaviour using key principles from the fields of ethology and behavioural ecology to explore the biological basis of animal behaviour. Placed within an evolutionary framework, the unifying principles of natural and sexual selection are used to investigate the driving forces that have shaped the remarkable diversity, and sometimes quite strange, suite of behaviours in animals that enable them to survive harsh climates, find mates, care for young, migrate across diverse landscapes, and learn to survive in their environment.

This course will draw upon examples from published journal articles to illustrate the complexity of behaviour and the driving forces that have shaped behaviour in natural populations.

Expected Learning Outcomes:

It is the aim of the course that students acquire the following skills:

- 1) Gain a full understanding of the mechanisms that enable animals to sense, and respond to, stimuli in their environment.
- 2) Develop the ability to critically evaluate hypotheses regarding the adaptive significance of specific behaviour.
- 3) Understand the research methodologies associated with the successful study of animal behaviour and develop the ability to design an experiment to test a specific hypothesis regarding animal behaviour.
- 4) Demonstrate scientific literacy in the field of animal behaviour and be capable of communicating their knowledge to peers through a term project culminating in a scientific presentation of a selected topic in animal behaviour.
- 5) Be able to distinguish the proximate and ultimate causes of behaviour in natural populations.
- 6) Gain an understanding of the different reproductive strategies, and the associated reproductive behaviour, in the animal kingdom and how individual organisms use behaviour to maximize their reproductive success.
- 7) Understand the role and complexities of social behaviour in the lives of animals and how such behaviour is integral to cooperation, conflict, social structure, and survival.
- 8) Be capable of integrating an ecological and evolutionary approach to the study of animal behaviour and being capable of seeing larger patterns as common threads interconnecting the diverse topics covered in the course.

Course Schedule:

*The following schedule provides a general guideline and timetable for topics and tests. It may change depending on progress through the semester. **Note:** The Lab and Tutorial schedule will be made available separately.*

| Day | Week | Date | Topics |
|-----|------|-------------------|---|
| TH | 01 | January 7, 2016 | Short introduction to the course, course outline, course evaluation |
| TU | 02 | January 12, 2016 | History of the Study of Animal Behaviour |
| TH | 02 | January 14, 2016 | Behaviourism and Ethology Key Figures in Ethology |
| TU | 03 | January 19, 2016 | Tinbergen's four questions Proximate and Ultimate Causes of Behaviour Behavioural Ecology and Sociobiology |
| TH | 03 | January 21, 2016 | Observing and Quantifying Behaviour |
| TU | 04 | January 26, 2016 | Sensing, Processing, and Responding to Environmental Stimuli Genetics of Behaviour and the Nature vs. Nurture Debate |
| TH | 04 | January 28, 2016 | Program Day - No classes |
| TU | 05 | February 2, 2016 | Evolutionarily Stable Strategies Game Theory |
| TH | 05 | February 4, 2016 | Hormonal Control of Behaviour Organizational and Activational Effects |
| TU | 06 | February 9, 2016 | Forms of Learning Case Study: Development and Learning of Bird Song |
| TH | 06 | February 11, 2016 | Test 01 Material from Week 01 to Week 05 (inclusive) |

| | | | |
|----|----|-------------------|--|
| TU | 07 | February 16, 2016 | Spring Break - No classes |
| TH | 07 | February 18, 2016 | Spring Break - No classes |
| TU | 08 | February 23, 2016 | Circadian Mechanisms Seasonal Patterns of Behaviour Migration and Animal Navigation Mechanisms |
| TH | 08 | February 25, 2016 | Animal Communication, Signalling, Displays Even though I'm a dog person, cats are pretty cool too |
| TU | 09 | March 1, 2016 | Animal Mating Systems, Parental Care Parent-Offspring Conflict and Dispersal |
| TH | 09 | March 3, 2016 | OPEN |
| TU | 10 | March 8, 2016 | Infanticide and Siblicide Animal Mating Systems, Alternate Reproductive Strategies |
| TH | 10 | March 10, 2016 | Animal Societies Cooperation and Conflict |
| TU | 11 | March 15, 2016 | Social Learning and Cultural Transmission |
| TH | 11 | March 17, 2016 | Test 02 Material from Week 06 to Week 10 (inclusive) |
| TU | 12 | March 22, 2016 | Predator-prey Interactions |
| TH | 12 | March 24, 2016 | Defense Mechanisms |
| TU | 13 | March 29, 2016 | Parasitism |
| TH | 13 | March 31, 2016 | Spatial Memory and Caching Behaviour |
| TU | 14 | April 5, 2016 | Applied Animal Behaviour |
| TH | 14 | April 7, 2016 | An Introduction to Primate and Human behaviour |
| TU | 15 | April 12, 2016 | OPEN |

Requirements:

All exams and assignments are announced and/or scheduled in advance. Assignments are due at the designated time; please see the late policy below for additional information about late submissions.

Theory (Lecture) Exams:

1. Term tests are objective, utilizing a variety of formats including multiple-choice, matching, true/false, short answer, calculations, drawing of diagrams and graphs/plots. Tests may also contain a set of selected short essay questions.
2. The final exam will have a structure similar to the term tests, with a combination of question formats. Approximately 50% of the final exam will cover new material (since term test 2 of 2). Approximately 50% of the exam will consist of comprehensive material. This ratio may change based on class progress but will be made clear prior to the final exam. Further details regarding this comprehensive material will be forthcoming.

Labs:

1. Lab Reports and/or Assignments (where applicable) are designed to review major concepts, summarize pertinent results, and demonstrate comprehension of material covered in both lab and lecture. Lab reports and/or Assignments will always be collected at the **BEGINNING** of the class in which they are due, unless otherwise noted by the instructor.

Please note: Attendance at the laboratory sessions is compulsory. Labs missed without excuse cannot be made up.

Submission of Assignments:

Over the course of term, we may be engaged in a number of projects/assignments that require both faculty-student and student-student collaboration that will be turned in for a grading. Thus, it will be vital that all parties take responsibility for their part in these activities. We will provide clear objectives, adequate time, and necessary assistance for completing any projects, assignments, experiments. As students, you will be responsible for working together and managing your time such that you are prepared for due dates.

Method of Submission: All written assignments and lab reports are to be **printed and handed in as a hard copy** unless otherwise instructed. **Note:** Emailed assignments will not be accepted unless specifically asked for as a submission method.

Late Submission of Assignments:

We realize that certain circumstances prevent students from turning in individual assignments on time and have developed the following late policy to address these rare situations. This policy will apply to all lecture and laboratory assignments. The late policy will **NOT cover term tests, quizzes, or the final exam**, all of which **MUST** be completed on time or a grade of zero will be assigned.

The following will only apply if the instructor is contacted **IN WRITING** prior to the deadline. Late submissions without contact prior to the deadline will not be accepted.

| Condition (calendar days include both weekdays and weekends) | Deduction |
|---|-----------|
| Assignment is turned in 1 calendar day after it is due (e.g. Due: Monday, handed in on Tuesday) | 20% |
| Assignment is turned in 2 calendar days after it is due (e.g. Due: Monday, handed in Wednesday) | 30% |
| Assignment is turned in 3 calendar days after it is due (e.g. Due: Friday, handed in on Monday) | 40% |
| Assignment is turned in 4 calendar days after it is due (e.g. Due: Monday, handed in on Friday) | 50% |
| Assignment is turned in 5 or more calendar days after it is due | 100% |

Attendance:

Regular attendance will be essential for success on all exams and assignments. No points will be subtracted from your grade for non-attendance. However, in-class assignments and any in-class graded activities cannot be made up and, **if missed, will receive a grade of zero.**

Grade Summary:

| Activity | Percent of Grade | Notes |
|--|------------------|--|
| Term Test 01 | 15% | *Term Project - Options are available: 1) Term paper (10 pages text) 2) 12 minute talk on a selected topic 3) 12 minute video of talk, or a documentary 4) Open to other proposals with approval |
| Term Test 02 | 15% | |
| Lab Reports / Activities / Assignments (3 or 4) | 15% | |
| Lecture / Activities / Assignments / Quizzes (4) | 10% | |
| Term Paper / Term Project* | 15% | |
| Final Exam | 30% | |

| Grade Summary: | |
|-----------------------|-----------|
| A+ | 97-100% |
| A | 93-96% |
| A- | 89-93% |
| B+ | 83-89% |
| B | 77-82% |
| B- | 70-76% |
| C+ | 67-69% |
| C | 63-66% |
| C- | 60-62% |
| D+ | 54-59% |
| D | 50-53% |
| F (Fail) | Below 50% |

Because of the nature of the Alpha 4.00 system, there can be no uniform College-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on the student registration system. Printed grade sheets are not mailed out.

Policies:

Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline**; please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Exam Scheduling

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devices in class. The professor has the right to disallow the student to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.