

Behavioural Ecology Syllabus

Department of Biology

BIOL 3062 Fall 2025

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present. The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people.

Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

Course Instructors

Name	Email	Office Hours
Andy Horn	aghorn@dal.ca	Catch me at lecture or email me, any time
TA's (3)	[emails available on Brightspace]	request by email

Course Description

This course examines animal behaviour from an evolutionary perspective. Using the theory of natural selection as a basis, we will examine foraging, grouping patterns, territorial behaviour, parenting, mating behaviour, social organization, aggression and cooperation. There will be discussions and essay assignments.

Course Prerequisites

BIOL 2060.03 (or BIOA 3001.03)

Student Resources

Please feel free to talk to Andy at lecture, or email him or any of the TA's if you have any questions at all.

Course Structure

Course Delivery

Course delivery is in-person. All testable material is conveyed in lectures. We'll try to provide recordings of lectures, but a recording may differ from what happened in-person (e.g., because it's a recording from a previous year). So it's best to come to lecture.

For tutorials, attendance can't be replaced. Quizzes are online and asynchronous (within a 24-hour window); final exam is in-person, during Dalhousie's final exam period.

Lectures

16:05-17:25 Wed, Fri in LSC P4250

Tutorials

Discussion groups of about 15 students each, led by a TA every two weeks through term, on one of the two days (Mon/Wed or Tues/Thu) and times that student registered for (T01, T02, or T03). Specific schedule is posted on Brightspace.

Course Materials

No required text. All course material is on Brightspace, so internet access is needed to submit assignments, complete quizzes, and access supplementary material (e.g., lecture recordings). If access is lost during a quiz, email instructor or TA as immediately as possible so that some accommodation can be made

Assessment

Tutorials 18%

Small-group discussions held about every 2 weeks throughout term (so there's 6 in total). Led by a TA, a group of about 15 students arrive prepared to discuss a short reading or to perform a simple exercise. Graded on attendance and participation; details (including schedule) on Brightspace.

Assignments 24%

Behaviour Journal (6%)

Throughout term, you'll submit 3 one-paragraph entries (1 per month), each of which describes a behaviour you've encountered, why it interests you, how it relates to the course, and a hypothesis and prediction about it. Informal writing's OK, since the entries are graded on clarity, completeness, and submitting on time (within the month). 2% each.

Essay (18%)

Up to 5 pages reviewing a topic you find interesting, in the style of review paper or blog post (either's fine). Due 24 November; detailed instructions are on Brightspace. Graded on clarity, organization, insightful content.

Quizzes 18%

Three multiple-choice, 20-minute quizzes (30 Sep, 31 Oct, 30 Nov). Accessible on Brightspace for 24 hours each, with no proctoring. Grade weight: highest 8%, middle 6%, lowest 4%

Final exam 40%

Cumulative, multiple choice, during final exam period.

Conversion of numerical grades to final letter grades follows the [Dalhousie Grade Scale](#)

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (0-49)
A- (80-84)	B- (70-72)	C- (55-59)	

Course Policies on Missed or Late Academic Requirements

There are **no scheduled make-up exams**. But **please don't come to class if you are feeling ill**. Student Declaration of Absences are not required. If you miss a quiz, exam, or tutorial, or will be late for an assignment, contact the instructor immediately, and some form of accommodation will be made if the absence was reasonable (details decided case by case). If you disagree about the grading of an assignment or exam, simply contact the grader and they will explain their rationale. For this discussion to result in a change of grade, you **must** contact the grader **within one week** of receiving the grade.

Course Policies related to Academic Integrity

There are no group assignments. Collaboration is not prohibited, but all work must be the individual student's own work. Plagiarism (and overreliance on tools such as ChatGPT) is strictly prohibited, and if suspected will be checked by means such as Urkund and communication with the student (e.g., to see if the student really understood a journal entry they wrote, or a question they answered correctly).

Learning Objectives

By the end of the course, you should be familiar with and be able to apply the main concepts and techniques of behavioural ecology, in discussion, in writing, and in your own observations.

Course Content

Below is the **tentative** schedule of lectures and quizzes.

Date	Topic		
W, 3 Sep	Introduction	W, 15 Oct	Signal Content
F, 5 Sep	Natural Selection	F, 17 Oct	Signal Design
W, 10 Sep	Hypotheses and Predictions	W, 22 Oct	GUEST LECTURE
F, 12 Sep	Optimality	F, 24 Oct	Sexual Selection
W, 17 Sep	Game Theory	W, 29 Oct	Sex and the Sex Ratio
F, 19 Sep	Comparative Method	F, 31 Oct	Mating Systems in Mammals
W, 24 Sep	Foraging	W, 5 Nov	Mating Systems in Birds
F, 26 Sep	Predators vs Prey	F, 7 Nov	Parental Care
W, 1 Oct	Groups	W, 19 Nov	Kin Selection
F, 3 Oct	Competition	F, 21 Nov	Reciprocity
W, 8 Oct	Contests	W, 26 Nov	Cooperative Breeding
F, 10 Oct	GUEST LECTURE	F, 28 Nov	Personality and Sociality
		W, 3 Dec	Human Behavioural Ecology

University Policies and Statements

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit or e-mail the Indigenous Student Centre at 1321 Edward St or elders@dal.ca. Additional information regarding the Indigenous Student Centre can be found at: https://www.dal.ca/campus_life/communities/indigenous.html

Internationalization

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." Additional internationalization information can be found at: <https://www.dal.ca/about-dal/internationalization.html>

Academic Integrity

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. Additional academic integrity information can be found at: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion, please contact the Student Accessibility Centre (https://www.dal.ca/campus_life/academic-support/accessibility.html) for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro (<https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html>)

Conduct in the Classroom – Culture of Respect

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). Additional diversity and inclusion information can be found at: <http://www.dal.ca/cultureofrespect.html>

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner - perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution. The full Code of Student Conduct can be found at: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Fair Dealing Policy

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie. Additional information regarding the Fair Dealing Policy can be found at: https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html

Originality Checking Software

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. Additional information regarding Originality Checking Software can be found at:

https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality-checking-software-policy-.html

Student Use of Course Materials

Course materials are designed for use as part of this course at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g. uploading to a commercial third-party website) may lead to a violation of Copyright law.