

Faculty of Science Course Syllabus (Section A) (revised June 2021)**Department of Biology**

BIOL 3062

Behavioural Ecology

Winter 2022

Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. We are all Treaty people.

Instructor: Andy Horn aghorn@dal.ca (don't hesitate to email me any time)

Lectures: MWF 5:35PM (for in-person delivery; lectures available asynchronously, too)

Tutorials: Online, about every 2 weeks through term, at the time (T01, T02, etc.) student signed up for

Course delivery: In person. Testable material will be available online, but with less context than given in live lectures. 15% of grade based on tutorial attendance (unless Dal classes are disrupted). See below for details.

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)

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. A more detailed list of outcomes is here: <https://biology.academics.cs.dal.ca/daedalus/manage/course/BIOL/3062>

Course Materials

- Internet access required (for quizzes and supplementary material). No required text.
- If access is lost during a quiz, exam, or tutorial, email instructor or TA as immediately as possible and make-up or other accommodation will be made
- Course website is on Brightspace: <https://dal.brightspace.com/d2l/home/201346>

Course Assessment (more details on each component are given on the course Brightspace site)

Testable material is only delivered in lectures. If in-person classes are disrupted for Dal courses, material will be delivered via lectures and/or readings available online.

Tutorial attendance is graded. Tutorials are held approximately every two weeks throughout term whichever tutorial timeslot (T01, T02, etc.) students are registered with (see Brightspace for schedule). If in-person classes are disrupted for Dal courses, affected tutorials will be replaced with equivalent self-directed, asynchronous exercise (see below*).

Component	Weight (% of final grade)	Date, details
Assignments		
Tutorials *	15% *	5 online small-group discussions, one about every 2 weeks Come ready to discuss a short reading or perform a simple exercise; details (including schedule) on Brightspace. 3% each, graded on attendance and engagement.
Essay	20%	Up to 5 pages reviewing a topic you find interesting, in the style of review paper or blog post (either's fine). Detailed instructions are on Brightspace. Graded on clarity, organization, insightful content. You can just hand the whole thing in by 30 Nov, or build it in two steps: 24 Oct (topic, why chosen, outline; 5%), 30 Nov (whole essay; 15%)
Tests/quizzes		
Quizzes	30%	Three multiple choice, 20-minute quizzes (3 Oct, 1 Nov, 1 Dec). Accessible on Brightspace for 24 hours each, with no proctoring. Grade weight: highest 15%, middle 10%, lowest 5%
Final exam	35%	Cumulative multiple choice, during final exam period.

* If Dal classes are disrupted, each tutorial scheduled for that period will be replaced with a brief (one-page) write-up of a behaviour you've encountered or an assigned reading, explaining why it interests you, and a hypothesis and prediction following from it. Full rubric will be posted on Brightspace.

Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale

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

Course Policies on Missed or Late Academic Requirements

There are no group assignments. Collaboration is not prohibited, but all work must be the individual student's own work; plagiarism is strictly prohibited. If you miss a quiz, exam, or tutorial, or will be late for an assignment, contact the instructor immediately, as some form of accommodation (details decided case by case) is usually possible. Student Declaration of Absences are not required. If you disagree about the grading of an assignment or exam, simply contact the instructor (or TA if they were the grader) and they will explain their rationale. But for this discussion to result in a change of grade, you **must** contact the grader **within one week** from when you received the grade.

Course Policies related to Academic Integrity

All assessment components are designed to safeguard academic integrity (e.g., by using individually distinct questions for individual users). Plagiarism software will be used at the discretion of the instructor and other graders.

Course Content

Below is a tentative list of lecture topics. For the final schedule, see course website.

Introduction
Natural selection and behaviour
Hypotheses in behavioural ecology
Optimality models
Comparative method
Foraging: basic models
Foraging: variations
Predators and prey
Group living
Group dynamics
Competition and territoriality Competition Contests Communication
Sex and the sex ratio
Sexual selection
Mating systems in mammals
Mating systems in other vertebrates Parental care Kin selection Reciprocity
Cooperative breeding
Social structure
Human behavioural Ecology
Applied behavioural ecology

Faculty of Science Course Syllabus (Section B) (revised June-2021)
Fall 2021-22

Department of Biology
BIOL 3062 (Behavioural Ecology)
Fall 2022

University Policies and Statements

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate

Academic Integrity

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of 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.

Information: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (Canada and Nova Scotia).

Information: https://www.dal.ca/campus_life/academic-support/accessibility.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.

Code: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

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

Statement: <http://www.dal.ca/cultureofrespect.html>

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 (1321 Edward St) (elders@dal.ca).

Information: https://www.dal.ca/campus_life/communities/indigenous.html

Important Dates in the Academic Year (including add/drop dates)

https://www.dal.ca/academics/important_dates.html

University Grading Practices

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

**Fall/Winter 2021-22
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Student Resources and Support

Advising

General Advising https://www.dal.ca/campus_life/academic-support/advising.html

Science Program Advisors: <https://www.dal.ca/faculty/science/current-students/academic-advising.html>

Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html

Black Students Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre/current-students.html

Academic supports

Library: <https://libraries.dal.ca/>

Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html

Studying for Success: https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html

Copyright Office: <https://libraries.dal.ca/services/copyright-office.html>

Fair Dealing Guidelines <https://libraries.dal.ca/services/copyright-office/fair-dealing.html>

Other supports and services

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness/services-support/student-health-and-wellness.html

Student Advocacy: <https://dsu.ca/dsas>

Ombudsperson: https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html

Safety

Biosafety: <https://www.dal.ca/dept/safety/programs-services/biosafety.html>

Chemical Safety: <https://www.dal.ca/dept/safety/programs-services/chemical-safety.html>

Radiation Safety: <https://www.dal.ca/dept/safety/programs-services/radiation-safety.html>

Scent-Free Program: <https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html>

Dalhousie COVID-19 information and updates: <https://www.dal.ca/covid-19-information-and-updates.html>