

**Faculty of Science Course Syllabus**  
**Department of Biology**  
BIOL 3630  
Field Methods in Animal Behaviour  
**Summer 2025**

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

**Instructors:** Andy Horn      [aghorn@dal.ca](mailto:aghorn@dal.ca)      LSC 4060  
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**Lectures:** First meeting 0830, 2 June 2025, LSC 4009. Thereafter, refer to detailed schedule.

**Laboratories:** Refer to detailed schedule.

**Course delivery:** In-person.

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### **Course Description**

First-hand experience in studying animal behaviour in the field. Day-long field exercises teach basic methods, then students plan, conduct, write up, and orally present a c. 3-day project of their own.

### **Course Prerequisites**

[BIOL3062.03](#) or [PSYO 2160.03](#) or PSYO 3160X/Y.06 or permission of instructor

### **Overview**

The purpose of this course is to give you first-hand experience in studying animal behavior in the field, so that by the end of the course you should be able to carry out field studies of your own. In a series of exercises, we will walk you through focusing questions, describing behavior, choosing sampling regimes, and designing experiments. You'll then apply these skills on a topic of your own choosing, which will be the main assignment of the course. You're not expected to produce a perfect study with a wonderful large data set, but you are supposed to show that you can apply the topics we've covered to your own work, in a systematic way.

### **Learning Objectives**

Ability to conduct a field study of animal behaviour, from conception to reporting, including familiarity with basic behavioural sampling and recording methods, exploratory data analysis, formulation of hypotheses and predictions, and study design as applied to field studies of animal behaviour.

### **Course Materials**

- No required textbook
- Course material, including details schedule, handouts, etc on Brightspace

- Feel free to email instructor any time

### Course Assessment

Component	Weight (% of final grade)	Date
<b>Tests</b>		
Exam	20%	9 June ( <i>tentative</i> )
<b>Assignments</b> (students may work in groups, but must submit assignments individually)		
Lab reports	30%	Day after each lab or TBA
Written proposal	15%	10 June ( <i>tentative</i> )
Final report	35%	17 June

### Other course requirements

As this is a field course, full attendance and participation is expected.

### 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

An assignment received after its due date might not be graded promptly. If it is received after the class received feedback on the completed assignment, it may also be graded according to more demanding criteria. Some labs and field trips might be cancelled or added depending on weather and class progress. Because this is a field course, missed coursework cannot be accommodated except in exceptional circumstances, which will be addressed case by case at the discretion of the instructor.

### Course Policies related to Academic Integrity

You can work on exercises, projects, and presentations in groups, but must submit separate write-ups that will be graded independently of each other.

**Details on assessment:**

**Exam (20%)** A multiple-choice or short answer exam held halfway through the course will quiz you on the core material, for example:

recording methods -- interval, instantaneous, continuous  
sampling methods -- ad lib, focal, scan, behavior  
measures -- defining/describing, validity/reliability, measures of interobserver reliability  
forming hypotheses -- exploratory observations & data analysis  
testing hypotheses -- predictions, data analysis, study design

**Lab reports (30%)** Each of the exercises in the first half of the course (the number will depend on the weather) will require a short, simple write-up, to be graded as follows:

- 1 handed in
- 2 handed in but incomplete
- 3 complete, but off track in places
- 4 on right track throughout, numerically correct or minor errors
- 5 perfect in every way

Lab reports are usually due the day after that lab's fieldwork, though we'll shift that depending on how the course is going. There's no late penalty for a late report, but it likely won't be graded as promptly, so you won't get feedback as quickly and -- if it's received after the class received feedback on the completed assignment -- it may also be graded according to more demanding criteria.

**Project proposal (15%), Final report (35%)** You will have as much guidance as you need in choosing and executing your project, and the field exercises will also help. The project will consist of a proposal and a write-up of the results in scientific format. We'll give you a detailed outline of what's to be included and will offer plenty of chance to communicate as you develop the project. You choose your own topic, with as much guidance from us (and classmates) as you need.

**What to bring on field trips and a few comments on safety**

Bring your cell phone, charged and turned on, and please work in pairs or groups when in less heavily traveled areas (even isolated bits of Point Pleasant Park, for example).

Please bring enough liquids, snacks/food, and any required/favourite meds (prescription or otherwise) to keep you going throughout the day, along with clothes appropriate for our notoriously changeable weather.

Any injuries, minor or not (e.g., stings, twisting your foot or knee, mysterious rashes), please let the instructor or TA know right away.

**Course Content** (schedule is tentative)

Note that the schedule will have to be very flexible pending weather; be alert for sudden changes of plans. We'll try to finish by 5PM each day – often before that -- but don't plan on it.

Mon 6/2 0830 LSC 4009 and elsewhere within walking distance  
Ethograms, measuring behaviour

Tue 6/3 0830 meet in LSC parking lot for trip to Shubenacadie Wildlife Park  
Recording methods and interobserver reliability

Wed 6/4 Time and place TBA (but in town; LSC 4009, Pt. Pleasant Park, or similar)  
Sampling methods

Thu 6/5 0830 *Tentative*: meet in LSC parking lot for trip to Eastern Passage  
Data analysis

Fri 6/6 Time and place TBA (but in town; LSC 4009, Pt. Pleasant Park, or similar)  
Study Design

Sat 6/7 0830 meet at Bishop's Landing for boat to McNabs Island  
Finding and asking questions

[Sun 6/8 day off]

Mon 6/9 Time TBA, LSC 4009  
Informal project proposals, Exam

Tue 6/10 [meetings by request]  
Written proposals due

Wed 6/11 – Sat 6/14 Continued work on (and help with) independent projects

Mon 6/16 Time TBA LSC 4009 Oral progress reports on projects

Tue 6/17 Written project due

**Faculty of Science Course Syllabus (Section B) (revised April-2022)****Fall/Winter 2022-23***BIOL 3630 Field Methods in Animal Behaviour***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](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](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](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](mailto:elders@dal.ca)).

**Information:** [https://www.dal.ca/campus\\_life/communities/indigenous.html](https://www.dal.ca/campus_life/communities/indigenous.html)

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

<https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=117&chapterid=-1&topicgroupid=31821&loaduseredits=False>

**University Grading Practices**

[https://www.dal.ca/dept/university\\_secretariat/policies/academic/grading-practices-policy.html](https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html)