



## **Faculty of Science Course Syllabus**

### **Department of Biology**

*BIOL3639*

*Herpetology*

*Summer 2025*

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

**Instructor:** *Malcolm Fenech* - [malcolm\\_fenech@outlook.com](mailto:malcolm_fenech@outlook.com)

**Office hours:** *No official office hours – if you need to contact me outside of class, send me an email and we can arrange a meeting.*

**Lectures:** *Monday-Saturday, 9-5*

**Laboratories:** *N/A*

**Tutorials:** *N/A*

**Course delivery:** *In-person*

### **Course Description**

This course is an introduction to herpetology, the study of reptiles and amphibians. Through lectures, group activities, and field trips, this course will give an overview of the diversity, ecology, physiology, and conservation of reptiles and amphibians. There will be a focus on diversity of reptiles and amphibians in Nova Scotia.

### **Course Prerequisites**

BIOL 2003 and BIOL 2060, or permission from the instructor

**Learning Objectives**

By the end of this course, you will:

- Be familiar with the major taxonomic groups of reptiles and amphibians, their ecology, and their biology, and how they differ from each other.
- Be able to identify Nova Scotian reptiles and amphibians to species.
- Be familiar with the pros and cons of different sampling methodology used in herpetology, and what methods are appropriate for what taxa.
- Be able to compare anatomical, physiological, and ecological features between different major taxonomic groups of reptiles and amphibians.
- Be familiar with the major global and local threats to reptiles and amphibians, and the ecological consequences of herpetological biodiversity loss.
- Collaborate with a group to present and describe ecological data for a scientific audience.

**Course Materials**

All course materials will be provided on Brightspace. There is no textbook for this class. Most materials needed for field trips will be provided.

*Helpful Websites*

The following websites may be helpful:

<http://www.canadianherpetology.ca/>  
<https://novascotia.ca/museum/amphibians/defaulten.asp>  
<https://www.merseytobeatic.ca/content/project-blandings-turtle>  
<https://www.merseytobeatic.ca/content/eastern-ribbonsnake>  
<https://novascotia.ca/natr/wildlife/species-at-risk/#blanding-turtle>

*Helpful Texts*

There is no textbook for this class, however, the following is a good text to help you in your studying, and good to have on hand for herping in the future:

*Peterson Field Guide to Reptiles and Amphibians of Eastern and Central America* by Roger Powell, Roger Conant, and Joseph Collins. Houghton Mifflin Harcourt, 4th edition, 2016.

<b>Course Assessment Assessment</b>	<b>Weight (% of final grade)</b>
<b>In-class reflections</b>	<b>8 @ 2 % each (16 %)</b>
<b>Assignments</b>	<b>4 @ 5 % each (20 %)</b>
<b>Species presentation</b>	<b>15 %</b>
<b>Local species observations</b>	<b>4 @ 4 % each (16 %)</b>
<b>INaturalist assignment</b>	<b>8 % each</b>
<b>Final exam</b>	<b>25 %</b>

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

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

#### **Course Policies on Missed or Late Academic Requirements**

*Late assignments will be penalized 10% per day for the first two days, and then will receive a mark of 0. If you are unable to complete an assignment, use the Student Declaration of Absence form. The weight of the missed assignment will be transferred to the final exam.*

*We will have several in-class exercises throughout the course. The exercises will be able to be completed and submitted on Brightspace for 24 hours, so no absence form is required if you are unable to attend class on the day of the exercise.*

**Course Policies related to Academic Integrity**

*The data assignments will be conducted in small groups. All other work is to be completed individually. Suspected plagiarism or other breaches of academic integrity will be addressed following university policy outlined in section B.*

**Brief Description of Assessments**

In class reflections: Students are to complete 8 in class reflections about various topics addressed in presentations, guest lectures, and local field trips. Each reflection will contain 4-5 short or single word answer questions and each reflection is worth 2 % of the final course mark.

Assignments: There will 4 assignments during the duration of the class where students will work independently and in small groups (3-4 individuals). Assignments will vary from species identification to habitat restoration. Each assignment will be worth 5 % of the final course mark.

Species presentation: Students will prepare and share a 15-minute oral presentation about a topic or species concerning herpetology which will be selected by the student. The presentation may be in the form of a powerpoint or a poster. The presentation is worth 15 % of the final course mark.

Local species observations: Students will prepare 4 local species observations with various descriptions, including, physiology, population status, and habitat types. Each observation will be worth 4 % for a total of 16 % of the final course mark.

iNaturalist assignment: Throughout the course, students will work on a project answering a question of their choice using iNaturalist data available in Nova Scotia. Students will submit a



short paper which will be submitted during the last week of the course. The iNaturalist assignment will be worth 8 % of the final course mark.

Final exam: Students will write a final exam with questions about lecture content provide by the instructor or guest presenters about Nova Scotian reptiles and amphibians. In addition, there will be photographs and audio recordings, questions about the lecture content (similar to what was on the worksheets), and questions about data/anatomysimilar to what was seen in the labs. The final exam will be worth 25 % of the final course mark.

## **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).

**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://www.dal.ca/academics/important\\_dates.html](https://www.dal.ca/academics/important_dates.html)



## University Grading Practices

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

## Student Resources and Support

### Advising

**General Advising:** [https://www.dal.ca/campus\\_life/academic-support/advising.html](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](https://www.dal.ca/campus_life/communities/indigenous.html)

**Black Students Advising Centre:** [https://www.dal.ca/campus\\_life/communities/black-student-advising.html](https://www.dal.ca/campus_life/communities/black-student-advising.html)

**International Centre:** [https://www.dal.ca/campus\\_life/international-centre/current-students.html](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](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](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/servicessupport/student-health-and-wellness.html](https://www.dal.ca/campus_life/health-and-wellness/servicessupport/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-gethelp/ombudsperson.html](https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-gethelp/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.htm>