

Faculty of Science Course Syllabus
Department of Biology
BIOL/MARI 4901 & 4902
Honours Research and Thesis I & II
Fall and Winter 2022-2023

Honours Coordinators: *Fall 2022:* Glenn Crossin

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Winter 2023: Margi Cooper

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Additional Course Evaluators: Paul Bentzen | paul.bentzen@dal.ca
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Lectures: Tues. & Thurs. 1135-1255 (Fall: Rowe 1016, Winter: Henry Hicks 212)

Course Description

This course is required of, and restricted to, all Biology/Marine Biology Honours programs in which Biology/Marine Biology is the major area of study. Students conduct a research project supervised by a research scientist and attend weekly meetings of the class. The classes ([BIOL 4901.03](#) and [BIOL 4902.03](#)) are taken in the students' final year. NOTES: [BIOL 4901.03](#) and [BIOL 4902.03](#) must be taken in consecutive fall/winter terms, or winter/fall terms (co-op only). Grades will not be recorded for either course until both have been completed, and the final Honours Thesis has been evaluated.

Course Prerequisites

Permission of Honours Coordinator

Course Exclusion

BIOL 4900.06 or MARI 4900.06

Course Details

- Your thesis proposal should be submitted to the Honours Committee, by emailing it to Glenn Crossin, as soon as it can be ready, particularly if you are conducting research over the summer prior to starting BIOL/MARI 4901. **Proposals not already approved during the summer should be submitted to the appropriate Assignment drop box on Brightspace by 5pm on September 9, 2022.**
- The Introduction and Methods sections of your thesis are **due by 5pm on December 7, 2022**, and will be formally evaluated by your supervisor(s). This evaluation will constitute *20% of your overall mark*. Submit these sections as a PDF to the appropriate Assignment drop box on Brightspace.
- Your Final Thesis is **due by 5pm on April 12, 2023** (or **December 7, 2022 for Co-op students**). Your thesis will be formally evaluated by three readers. The *median* of the grades assigned by these readers will constitute *60% of your overall mark*. Submit your thesis as a PDF to the appropriate Assignment drop box on Brightspace.
- You will give two presentations about your on-going thesis research in class. One will be a conference-style presentation (*worth 5% of your overall mark*) and one will be an “elevator pitch”, a 1-minute, high-level explanation of your project (*worth 1% of your overall mark*). Presentations should be prepared with the assistance of your thesis supervisor. We encourage your supervisor(s) to attend the class the day of your conference-style presentation.
- The Biology Department runs a seminar series most Thursdays from 11:30am-12:30pm. This year, it will be a mix of in-person seminars, held in the 5th Floor Lounge, and seminars delivered via Teams. All seminars will be recorded and made available to the department. Seminars from the last two years are available on the Dalhousie Biology Departmental Seminar channel (<https://www.youtube.com/channel/UCr54hscxQsx3M287jYFdgvw>). You will need to attend/watch 3 seminars and for each, complete a Seminar Reflection assignment in which you will critique and/or reflect on the speaker’s communication strategies. The assignment document is available via Brightspace. **Your first reflection is due October 3, 2022. The next two reflections are due no later than March 31st, 2022.** Submit your reflections to the appropriate Assignment drop box on Brightspace. Together, your three seminar reflections are *worth 4% of your overall mark*.
- Students who performed well during the class presentations will be offered an **oral presentation** spot at the Cameron Conference. All other students will present a **poster presentation** at the Cameron Conference. Your supervisor(s) should also help you prepare

your abstract and presentation. Abstracts will be due by **January 20, 2023**. The 37th Annual Cameron Conference will be held on **February 11, 2023**. It is our hope that this year's conference will be held in person, but a final decision will be made toward the end of Fall term, based on the public health situation at that time.

- In addition to a grade in BIOL/MARI 4901 & 4902, a grade in BIOL/MARI 8880: Honours Qualifying Exam will appear on your transcript when all the requirements for the Honours program have been satisfied. The Biology Department grades this "exam" on a pass/fail basis. To pass, you must:
 - Satisfy the Honours program requirements (required courses and minimum cGPA).
 - Attend all classes. Attendance will be recorded and participation noted. If a class is missed, you must contact Glenn Crossin (Fall) or Margi Cooper (Winter) as soon as possible (or beforehand if you know you will miss a session) and submit an SDA form to the appropriate Assignment drop box on our Brightspace site. A maximum of two SDA may be used each term.
 - Participate and present at the Cameron Conference.

Course Assessment

Class Presentations	6%	Fall or Winter Term
Seminar Reflections	4%	Fall and Winter Term
Cameron Conference Presentation	10%	February 11, 2023
Thesis	80%	Introduction and Methods due Dec. 7, 2022; Final Thesis due April 12, 2023 (Co-ops submit Dec. 7, 2022)

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

Extensions for submitting theses will be considered on the basis of:

- a documented medical issue
- a letter from the supervisor stating the reasons for an extension and approving the request

Thesis extensions are granted only in very extenuating circumstances, such as a health crisis or in cases where a student's experiments fail due to circumstances outside of his/her control and where such a failure prevents the student from completing a thesis. Each of these cases are reviewed by the Honours Committee before an extension is granted. Requests for extensions so that a student can expand a thesis into a manuscript for submission are not granted. Creating a publishable manuscript is indeed encouraged, but the thesis must be submitted at the end of the Honours course in April (or December option for Co-ops)

Requests for extensions must be submitted in writing to the Honours Committee two weeks BEFORE the thesis submission date of April 12th, 2023. Email requests and supporting letter to Margi Cooper (mhcooper@dal.ca). The student will then have until August 1 to complete and submit the thesis.

Those receiving an extension will not graduate in May, but will do so the following October. The student will receive an "INC" on their record (BIOL/MARI 4901 & 4902). When the final grade has been determined in August, the INC will be removed and the appropriate grade inserted. If students intend to graduate in May, then a thesis extension is not possible.

Theses submitted after the deadline, without a formal extension, will receive a late penalty of 15% per day.

Tentative Course Schedule

Date		Session Topic
Sept	6	Welcome to Honours
	8	Gwen MacNairn - Biology Liaison Librarian with strategies for library research
	13	Career Panel - Panelists from Academia, Government, NGO, and Industry
	15	- Preparing a Scientific Presentation - Evaluator Tips (Glenn Crossin) - Jennifer Van Dommelen - Zotero Citation Management System
	20	Boris Worm - Science Communication for Societal Impact
	22	Department of Biology's Graduate Coordinator (Dr. Daniel Ruzzante) and Graduate Admissions Coordinator (Dr. Alastair Simpson)
	27	Elevator Pitches
	29	Elevator Pitches
Oct	4	Student Presentations
	6	Student Presentations
	11&13	Tuesday - Student Presentations/Thursday - Departmental Seminar
	18&20	Tuesday - Student Presentations/Thursday - Departmental Seminar
	25&27	Tuesday - Student Presentations/Thursday - Departmental Seminar
Nov	1	Student Presentations

	3	NSERC and Graduate School Applications - Optional / Departmental Seminar
	7-11	Reading Week
	15&17	Tuesday - Student Presentations/Thursday - Departmental Seminar
	22&24	Tuesday - Student Presentations/Thursday - Departmental Seminar
	29	Student Presentations
Dec	1	Student Presentations
	6	No Class
	7	Introduction and Methods Due - 5pm
Jan	10&12	Tuesday - Student Presentations/Thursday - Departmental Seminar
	17&19	Tuesday - Student Presentations/Thursday - Departmental Seminar
	24&26	Tuesday - No Class/Thursday - Departmental Seminar
	31	Preparing for the Cameron Conference
Feb	2	Departmental Seminar
	7&9	Tuesday - No Class/Thursday - Departmental Seminar
	11	CAMERON CONFERENCE - All Day
	14&16	Tuesday - No Class/Thursday - Departmental Seminar
	20-24	Reading Week
	28&30	Tuesday - No Class/Thursday - Departmental Seminar
March	2	Departmental Seminar
	7&9	Tuesday - No Class/Thursday - Departmental Seminar
	14&16	Tuesday - No Class/Thursday - Departmental Seminar
	21	Thesis Formatting Q&A
	23	Departmental Seminar
	28&30	Tuesday - No Class/Thursday - Departmental Seminar
April	4&6	Tuesday - No Class/Thursday - Departmental Seminar
	12	Final Thesis Submissions Due - 5pm