

BIOL 490 02 Independent Study

2021-2022 academic year, fall and winter semesters (September 2021 to April 2022)

6 credits

There are no scheduled lectures or laboratories, the student works under the direction of their supervisor. No formal minimum number of hours is specified, but consider that a typical 400-level BIOL course with laboratory entails two 75-minute lectures and one 4-hour lab each week for 13 weeks, plus at least that much time outside of the lectures and labs spent on reading, etc. Thus a student may expect to spend 13 hours each week in the lab, but check with the supervisor.

Prerequisite: Within 30 credits of graduating with a BSc in a Department of Biology honours or specialization program, and permission of the Department. Students should have a Cumulative and Annual GPA of at least 3.00. Students with a GPA of 2.70-2.99 may be considered on receipt of two letters from faculty members (other than the proposed supervisor) attesting to the student's ability to complete the course successfully.

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Telephone and e-mail may be used to set up appointments.

In this course, the student undertakes a special research project selected in consultation with, and conducted under, the supervision of a faculty member of the Department. The project is intended to develop the student's knowledge of standard scientific procedures, including methods of researching scientific literature, the planning and execution of experimental and analytical procedures, the writing of a formal report, and the presentation of a seminar on the project.

(from <http://www.concordia.ca/academics/undergraduate/calendar/current/sec31/31-030.html>)

Course Philosophy

Although credited as a six credit course, this is a research project. It is essentially an apprenticeship under the supervision of a professor, providing the student with an opportunity to experience primary research. With the help of the supervisor, the student is expected to plan and execute experiments, collect and analyse data, and finally present the results orally and in a formal report.

Marking

research activity	25%	(evaluated by the supervisor)
oral presentation	25%	(19 April, evaluated by any faculty members present)
thesis	50%	(due 26 April, evaluated by the committee)

The oral presentation mark is the median of all those submitted by faculty present. The thesis mark is the mean of the marks submitted by the committee [supervisor(s) and committee members]. Under exceptional circumstances the committee may grant a short extension (no more than one week) on the thesis due date, but such an extension **must be granted before the due date**. Note that it is the responsibility of the student to contact the committee early enough that the request may be considered and responded to. Any thesis submitted late without *prior* approval of the committee will be penalized 2/50 (4%) per day or part thereof. The total mark may be curved if appropriate, at the discretion of the BIOL 490 Coordinator, and the letter grade is assigned based on the total mark:

<u>%</u>	<u>grade</u>	<u>%</u>	<u>grade</u>
95-100	A+	67-70	C+
90-95	A	63-67	C
85-90	A-	60-63	C-
80-85	B+	57-60	D+
75-80	B	53-57	D
70-75	B-	50-53	D-
		40-50	F
		0-40	R

Note that marks are not rounded (e.g., 79.99999999% is still B but 80.00000000% is B+).

Research Activity: The specifics of the projects vary greatly, but the supervisor will assess the competence of the student in carrying out the research (e.g., in the laboratory and/or in the field).

Oral Presentations: These will be in-person. The schedule will be published near the end of the semester, each student will have 15 minutes for their presentation. The actual talk will be 10 minutes with 5 minutes reserved for questions. Note that presentation computer files should be submitted to the BIOL 490 Coordinator no later than 18 April at 16:00, and should be compatible with a "PC" computer.

Thesis: There is no specified length for the thesis, but it should be clear and concise. In general it should be similar to papers published in peer-reviewed journals. Check with your supervisor(s) and committee members about the format.

This is a six-credit course that requires a great deal of time and focus, students often underestimate how much work is involved (especially in writing the thesis). Students are encouraged to start writing the thesis as soon as possible (before experiments are completed), and to stay in touch with their supervisors as work progresses.

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.