Department of Biological Sciences
Directed Research Permission Form (BIOD98Y & BIOD99Y)
2022-2023 academic year

Students wishing to enroll in an independent directed research course (BIOD98Y or BIOD99Y) must read and follow these instructions carefully. In addition, please note the prerequisites and/or exclusions associated with each of these courses.

1) Read the General Information Sheet (last page of this document).

2) Meet with your potential faculty supervisor to discuss the proposed research you would do and the method of assessment of your performance. If your proposed supervisor is not a member of the UTSC faculty you must also find a co- supervisor in that discipline at UTSC. Approval for doing research with an off-campus supervisor and the co-supervisor must be given by the Course Coordinator (Dr. Jeneni Thiagavel) prior to enrollment.

3) Fill in the Directed Research **Permission form** (this form) and the **Registrar's Supervised Study form** with your supervisor. Please ask your supervisor to digitally initial every page of your academic history (transcript). Arrange for co- supervision if necessary (see point 2 above for clarification).

4) Drop off or e-mail (i) the permission form, (ii) the supervised study form, and (iii) initialed academic history to the staff in the Biological Sciences Admin Suite (SW421A) once you have obtained the necessary approval and add the course on ACORN. E-mail: biology-general@utsc.utoronto.ca

After all forms have been completed, signed and reviewed at the department, your course status on ACORN will change from interim (INT) to approved (APP). Unless the SUPERVISED STUDY form you present carries the proper endorsement, your enrolment in the course on ACORN will not be valid.

Student name:_____ Student #: _____

E-mail:_____ Telephone #: _____

Course # & Session: _____

Student signature:_____ Date: _____

*Please append a student copy of your transcript (from ACORN). Each page of your transcript must be signed by your supervisor (and co-supervisor in the case of an off-campus project).

Supervisor name: _____

Supervisor signature: _____ Date: _____

Co-supervisor name:_____ (if applicable, see above)

Co-supervisor signature:_____ Date: _____

Course coordinator signature: _____
(if applicable, see above)

Student name: _____

Breakdown of evaluation of BIOD98/99 students:

Supervisors are requested to use this template as a guide and can choose from specific categories listed below. Mentors can also include additional project-specific criteria for assessment. Note that the value of the written paper is valued at 40% of the student's final grade.

1. Intellectual contribution to project =

2. Participation & attendance at lab meetings/other group meetings =

3. Effort and time spent on research project=

4. Meetings with supervisor
   (assessing self-directed learning, punctuality in meeting deadlines etc.) =

5. Lab citizenship / working with others =

6. Oral presentations
   (presentation to lab group/mentor or other scientific group meetings) =

7. Lab notebooks / electronic records of experiments =

8. Other: _____

9. Other: _____

10. Other: _____

SUBTOTAL (Sum of items 1-10 above) = 30%

Written paper (final submitted, drafts of final paper or other group related reports) **as evaluated by the primary supervisor = 40%**

TOTAL GRADE contributed by primary supervisor = 70%

Final oral presentation to department = 5%

Second reader grade (paper only) = 25%

TOTAL = 100%

Directed Research Courses in Biological Sciences (B1OD98Y & B1OD99Y)
2022-2023 academic year - General Information Sheet

BIOD98 and BIOD99 are Y courses worth 1 full credit. If you wish to become involved in our independent research courses in Biology, you must first have completed credits of which at least 4 must be Biology B or C level courses. You should then consult directly with the faculty member whose research seems relevant to your interests. Keep in mind that any given faculty member can usually only accommodate one or two research students. You should acquaint yourself with the general format and requirements of these courses. That is the purpose of this information sheet. Please read it carefully.

Requirements and Deadlines

1) Students working in a lab or doing field research must complete WHMIS (online) & Lab Safety Training. Students working with animals must complete animal care training. Students working with biohazards must undergo biosafety training. Contact Human Resources for this training or your supervisors should be able to alert you about the dates that these training sessions will run and the registration process.

2) Important announcements will be posted on Quercus site. You should check the site regularly for announcements.

3) You will be required to submit a full written report on your research. The due date for your written paper is the last day of the winter semester, **Monday, April 10th, 2022.** This is a fixed university deadline and is not subject to change. A penalty of 20% (of your final grade) per day will apply if your assignment is late. [Note: In an extraordinary case, an extension can only be approved by the Chair of the Biological Sciences Department, if a request is made via the course coordinator prior to the due date.] You must submit **one electronic copy** of your report to Dr. Jeneni Thiagavel (jeneni.thiagavel@utoronto.ca) by **4 PM** on the date listed above and a **second electronic copy** to your research supervisor.

4) Students working with off-campus instructors require a co-supervisor from this campus. Approval for doing research with an off-campus supervisor and permission for an on-campus co-supervisor must be obtained from the Course Coordinator (Dr. Jeneni Thiagavel; jeneni.thiagavel@utoronto.ca) prior to registration.

Procedure

Ordinarily, you will begin the research at the start of the semester, meeting with your faculty supervisor to determine the project you will be working on. Once under way, you will work on carrying out the project, meeting periodically with your supervisor. You will also be meeting once during the term with the course TA or Dr. Thiagavel to discuss your progress (meeting schedule will be posted on Quercus). Toward the last two to three weeks of the semester, you should be presenting drafts of your research paper to your faculty supervisor for feedback and revision, so that everything can be finalized by the deadline specified above. Your final paper should be in the form of a standard scientific paper. Please note that students may be asked to submit copies of their final paper via Ouriginal on Quercus – please watch for Quercus announcements and instructions. There are no tutorials in this course. You will be required to present your research in an oral presentation to the department at the end of the Winter term (D98/99 presentation day). The date, session schedule, and room numbers will be posted on Quercus.

Evaluation

Evaluation will be based in part on the research paper and in part on the appraisal by your faculty supervisor of your performance in the research course. You should ascertain the breakdown of your evaluation in this course before signing into the course and your mentor should indicate their grade breakdown on the form submitted to Registrar's Office and on the **template provided on the previous page.** The primary supervisor contributes 70% based on their evaluation of your performance during the academic year and your research paper.
Note: Whether the research works out as anticipated does not affect your grade, assuming that the work has been well done and the paper is a well-written description of the work. You will in no way be penalized because the data were not ideal. You and your supervisor may agree on an arrangement for the work to be undertaken and for scheduling along the way, but the rules you have just read above apply to *all* BIOD98/99 research students and cannot be contravened in individual cases.