

## INFORMATION ABOUT BIOLOGY HONOURS

Note: this is advisory only; all degree requirements are as specified in the University Calendar.

### 1. What is an honours?

Biology majors may elect to do a B.Sc. (Honours). Students are required to complete 23 Biology courses (8 more than for General Science) and two of these must be Biology 499A/499B (Honours Dissertation). In Biology 499A/499B, students undertake an independent field or laboratory research project under the guidance of a supervisor; organize & analyze the data and ideas; and write and publicly defend a dissertation on the topic. Honours students must attain a “B” or better in each Biology course beyond first year (or a 75% average in Biology courses), and an overall Grade Point Average of at least 2.75 on the total (i.e. 40 courses or 120 credit courses), required for the degree. The honours programme is challenging but is valuable to students interested in pursuing graduate studies in the biological sciences. Many graduate programs require that you have one. It may also give students a competitive edge when applying to professional schools.

### 2. Applying for admission to the Honours Programme.

Biology majors may apply to enter the Honours Programme no sooner than the start of their fifth semester at university.\* Students should fill out the application form obtainable from the Registrar’s Office and return it to the Registrar’s Office. This application is sent to the Biology Department where the student’s record is checked. If the student meets the academic requirements, a letter is sent to the student giving provisional acceptance to the Honours Programme. Included with this letter of provisional acceptance will be a form to be signed by the student’s supervisor. **Only when this form, signed by the supervisor, is received by the Biology Department will the student be fully accepted into the Honours Programme.** If a supervisor has not been found by the student within a year the student must re-apply to enter the Honours Programme.

**\*The earlier one enters the honours program the more likely s/he will be able to plan and complete this program in a 4 year period.**

### 3. Finding a supervisor and a topic.

This is required to do the two semester linked course, Biology 499A/499B. If you wish to complete the Honours Programme in four years, you should have a supervisor and a topic by at least mid-term of your sixth semester.

The supervisor will normally be a faculty member of the Biology Department. However, faculty from other areas of the university (e.g. Biochemistry, Earth Science, Psychology, Medicine, Ocean Sciences Center) may also be supervisors of Biology students where the dissertation topic warrants. In addition, research scientists working with a government agency such as Department of Fisheries and Oceans, Wildlife or Agriculture may also act as supervisors. In cases where a supervisor is external to the Biology Department (either within the university or not) a co-supervisor from within the Biology Department must be chosen or assigned. The external supervisor should meet with the honours students and co-supervisor to discuss the project.

Students are responsible for making the initial approach to potential supervisors and should try to have some general ideas for a dissertation topic. Don't be shy or easily intimidated!! Potential supervisors should be given a brief C.V., a transcript and a cover letter that provides them with your background and areas of interest.

There is no single or easy way to find a supervisor and a topic, but usually one (or a combination) of the following routes is employed:

- a. The Biology Department keeps a list of some possible Honours projects in the General Office. Students may use this to get some idea of potential supervisors and topics.
- b. Talking to people. Ask your instructors (faculty, laboratory instructors, instructional assistants, graduate student demonstrators).
- c. Students with definite ideas of the area in which they wish to work should directly contact faculty (or other scientists) in that area. Anyone uncertain of the appropriate person to act as a supervisor should ask their faculty advisor or the Head of the Department.
- d. Students who wish to work with a particular supervisor should approach that person directly.

Because of their greater experience in evaluating possible projects in terms of time or money, the final design of dissertation projects and whether to supervise them is up to the faculty members or external scientists involved.

#### **4. What is an appropriate dissertation topic?**

The spirit of Biology 499A/B is that the student should directly and personally conduct original research that generates data, usually from the basis of one or more testable hypotheses.

#### **5. How much work is involved?**

The amount of work involved in either 499A or 499B is intended to be equivalent to other senior level courses. As an approximate guide this is taken to be about 12 hours per week per course, or about 160 hours per course (= about 320 total for 499A and 499B combined). The onus is on the supervisors to help you select, define or redefine research topics so they will require no more work than indicated above.

#### **6. Who pays for the dissertation research?**

The Biology Department does not directly fund Honours students, but will provide supplies worth up to \$500 to the supervisor for the honours research.

#### **7. What is the "Red Book"?**

The red book is a guide for both students and supervisors for registration and successful completion of the Honours Dissertation courses, Biology 499A and 499B.