

Courses currently offered by Dr Donna Giberson

***132 INTRODUCTION TO ORGANISMS**

This course provides an introduction to the science of Biology, with emphasis on organismal biology and unifying themes. The course deals with evolution, the diversity of life, form and function, and ecology. Part of the laboratory component involves training in dissection techniques.

PREREQUISITE: Biology 131, or permission of instructor

Three hours lecture, three hours laboratory a week

***331 RESEARCH METHODS AND COMMUNICATIONS IN BIOLOGY**

This course is an introduction to research methods and the basic principles of scientific communication, as expressed in the Biological Sciences. Lectures and assignments focus on the principles of study design; analysis, interpretation, and presentation of biological data; and the preparation of scientific papers and reports. Students critically evaluate papers in their areas of interest, and gain experience in presenting scientific information to their peers (both orally and as scientific posters).

PREREQUISITES: Biology 131 and 132, and 6 semester-hours of core Biology courses

Three hours lecture, Three hours laboratory a week

***462 WATERSHED ECOLOGY**

The focus of this course is the study of watersheds, with emphasis on those found on Prince Edward Island. Lectures focus on the physical, chemical, and biological characteristics of streams and their surrounding riparian zones, and labs will include practical application of stream sampling methods.

PREREQUISITES: Biology 222 or equivalent

Three hours lecture, three hours laboratory a week.

441 DIRECTED STUDIES IN BIOLOGY

Available to third year Biology Majors, preferably those who have completed their second year Biology courses. Entry to the course, and the conditions under which the course may be offered will be subject to the approval of the Chair of the Department and the Dean of Science. (See Academic Regulation 9 for Regulations Governing Directed Studies)

Three semester hours of credit.

***490 ADVANCED RESEARCH AND THESIS**

This is a 12 semester-hour course required of all Honours students. It is intended to provide the student with an opportunity to design, carry out, evaluate and write up a research project in an approved scientific fashion, while working under the direction of a chief advisor assisted by an advisory committee. Normally the research will be done during the summer session preceding the student's graduating year, and the thesis written during the final academic year. The objective of this course is to provide research experience for the student who intends to take up further studies at a post-graduate level or for the student who is planning on entering a career where research experience in Biology or related areas would be an asset.

PREREQUISITE: Acceptance to the Honours Program in Biology.

BIOLOGY 812 ADVANCED TOPICS IN ECOLOGY AND ENVIRONMENTAL SCIENCES

This course covers advances in practical and theoretical aspects of aquatic and terrestrial ecology, and represents one of the three general axes of research expertise within the Department. A combination of formal lectures, directed readings, and group discussion of journal articles is used. Students are expected to prepare written reports or present seminars.

PREREQUISITE: Admission to a graduate program in Science or permission of the instructor.

HOURS OF CREDIT: 3

BIOLOGY 862 ADVANCED FRESHWATER ECOLOGY

This course provides advanced study in the ecology of freshwater habitats, particularly those found on Prince Edward Island. The first part of the course concentrates on the physical, chemical, and biological characteristics of fresh waters, classification of freshwater habitats, and applied limnology. A laboratory/field component includes an introduction to water analysis techniques and field equipment, field water analysis, the collection and analysis of biological samples, and the physical properties of water. The second part is a field/lab project on a limnological topic tailored to the student's individual program, and consists of an experimental or observational study coupled with a comprehensive literature review, project write-up, and oral presentation.

NOTE: Credit is not given for both Biology 462 (Limnology) and Biology 862