Undergraduate Research

Many students conduct undergraduate research (BIO 4491/4492 – Guided Independent Research) under faculty members' supervision. The students learn research techniques as they work closely with faculty members. Each year our undergraduate students present their research findings at regional and national scientific meetings and some publish them in professional journals. Our students have won numerous awards for their research.

Please consider the General Biology Concentration as your academic choice at Troy. For more information, contact:

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Troy University
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General Biology Concentration

More students are enrolled in the General Biology Concentration than in any of the Department’s other concentrations, programs, or majors. Its popularity is due to the wide choices of Departmental courses in which students may enroll to meet the diverse academic requirements of professional schools, graduate schools, and employment in the public and private sectors.

Overview of the Concentration

During the freshman and sophomore years, students complete general studies requirements in English, mathematics, and computer sciences. They also complete their foundation courses, such as Principles of Biology and Organismal Biology, General Chemistry I & II, General Ecology, Genetics, and Organic Chemistry I & II, which prepare them for advanced courses. Students complete Physics I & II and their upper level biology classes during their junior and senior years.

Program of Study

Freshman Year
Fall
Principles of Biology
Principles of Bio. Lab
Chemistry I
Chemistry I Lab
Composition I
Calculus I
Orientation

Spring
Organismal Biology
Organismal Bio. Lab
Chemistry II
Chemistry II Lab
Composition II
General Studies
General Studies

Sophomore Year
Fall
General Ecology
General Ecology Lab
Organic Chemistry I
Organic Chem I Lab
World Literature I
General Studies

Spring
General Microbiology
General Microbio Lab
Organic Chemistry II
Organic Chem II Lab
World Literature II
Applied Statistics
General Studies

Junior Year
Fall
Botany/ Zool. Lecture
Botany/Zoology Lab
Genetics
Genetics Lab
Physics I
Physics I Lab

Spring
Botany/Zool. Lecture
Botany/Zoology Lab
Field Biology course
Physics II
Physics II Lab
General Studies

Senior Year
Fall
Upper level Bio Lecture
Upper level Bio Lab
Upper level Bio Lecture
Cell and Molec
Cell and Molec Lab
General Studies

Spring
Upper level Bio Lecture
Upper level Bio Lab
Upper level Bio Lecture
Lecture General Studies
Elective

Career Opportunities

The General Biology Concentration serves as the academic home for students with three different career goals.

First, most of the Department’s health professions students are enrolled in the General Biology Concentration. Because admission to professional schools is extremely competitive, it is essential that students prepare for the academic commitment that the pre-health professions require.

Admission to professional schools is based on grade point average, performance on national exams, such as medical, dental, optometry, or veterinary aptitude exams, interviews, and letters of recommendation.

Second, other students plan to attend graduate school. They select those courses that are most appropriate for their future studies and also take the Graduate Record Examination.

Many graduate schools offer assistantships to help defray the costs of a graduate education.

Third, many students seek jobs in the private and government (state and federal) sectors upon graduation.

The Concentration builds a strong foundation in the biological, chemical, and physical sciences that makes our students’ credentials attractive to prospective employers, graduate, and professional schools.