

Purpose Statement:

To enhance student preparation for professional studies in the health sciences.

Program Description

The Department of Biology is committed to helping students maximize their God-given potential. The graduate certificate program in Pre-professional Biology focuses on those students who have already completed the prerequisite coursework for admission into a professional program but require a stronger background in Biology in preparation for taking or improving their admissions exam and/or who may need to boost their science GPA to be competitive for admission to any of a variety of professional programs. Many professional programs are extremely competitive with many applicants being turned away each year. It is critical that a student's application stand out from their peers. The graduate certificate program in pre-professional biology is positioned to assist students in this way. The curriculum has been

539. Ecotoxicology (4) W

A comprehensive overview of the ecological consequences of environmental pollution, the effects of toxic substances on the ecosystem as a whole and on individuals with that ecosystem and the methodology of assessing pollutant damage. Three hours lecture and laboratory week.

570. Graduate Project I (2) F, S

Students enrolling in this course will work with a faculty mentor on a year-long project, culminating in a research paper, which will be defended in a public forum before a committee of three faculty members (including the mentor). The Center will work with the student to select courses to support the general overview of the project.

540. Experimental Design and Biostatistics (4) F

Statistical analysis of data in a biological context. Students will be given the opportunity to identify a variety of biological problems, develop specific questions, design and conduct experiments to address these questions, formulate and test hypotheses, choose and run the appropriate statistical test, and interpret the outcomes of such test. Three hours lecture and laboratory week.

571. Graduate Project II (2) F, S

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541. Histology (4) W

The branch of anatomy that deals with structure, composition, design and function of body tissues as it relates to the principles of physiology, biochemistry, molecular biology and medicine. 4 hours lecture and laboratory week.

542. Medical Parasitology (4) W

Parasitology is a course that will apply information learned in a variety of Biology courses to the study of parasites and parasitic diseases. Specifically, this course will address the ecology, epidemiology and biochemistry of parasites and diseases caused by parasites. The laboratory will focus on the identification of important parasite groups and methods for host examination and diagnosis. Three hours of lecture and laboratory week.