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 certi cate 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 certi cate 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 HOURS LABORATORY WEEK

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 speci c 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 HOURS LABORATORY WEEK

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 4HREE HOURS LECTURE AND HOURS 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. Speci cally, this course will address the ecology, epidemiology and biochemistry of parasites and diseases caused by parasites. The laboratory will focus on the identi cation of important parasite groups and methods for host examination and diagnosis. Three hours of lecture and HOURS 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 mentor will work with the student to select courses to support the general overview of the project.

571. Graduate Project II (2) F, S
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