Department of Biological Sciences PRE-HEALTH PROFESSIONAL Track

One of the many majors chosen by students planning to continue their education after undergraduate school in one of the health professional areas (medicine, dentistry, optometry, veterinary medicine, pharmacy, and many others) is Biological Sciences. A Biological Sciences major gives a good, broad-based background in the sciences upon which to build in health professions education. The required classes listed below are prerequisites for application to virtually all health professions schools (absolute requirements may vary slightly from institution to institution). The classes recommended to complete the Biological Sciences major provide the breadth to prepare graduates for a number of career options including health professional fields.

Required Courses

*BIOL 2000: Biology Today (1)*
*BIOL 2040: Concepts in Biology I (4)*
*BIOL 2050: Concepts in Biology II (4)*
*BIOL 3500: General Genetics (4)*
*CHEM 1250, 1270 & 1280 or 1350, 1370 & 1380: General Chemistry (10)*
*CHEM 3410, 3440 & (3450 or 3460): Organic Chemistry (9-10)*
*MATH 1310 or 1340 & 1350: Calculus (5-6)*
*PHYS 2010 & 2020 College Physics (10)*

Biochemistry strongly recommended.

In addition to completion of the required courses, a minimum of 17 hours of Biology electives must be completed. At least one course from each Group (I, II, III) must be completed as part of the 17 hours, and 10 of those hours must be 400 level.

Recommended Courses

**Group I. Biology of Organisms**

*BIOL 3130: Microbiology (4)*
*BIOL 3310: Human Anatomy & Physiology I (4)*
*BIOL 3320: Human Anatomy & Physiology II (4)*
*BIOL 4050: General Parasitology (4)*

**Group II. Ecology, Evolution, & Behavior**

*BIOL 4490: Epidemiology (3)*

**Group III. Cellular, Molecular, & Regulatory Biology**

*BIOL 4070: Cell Biology (4)*
*BIOL 4080: Molecular Biology (3)*
*BIOL 4310: Developmental Biology (3)*
*BIOL 4010: Independent Research (1-4)*

The following courses are also good choices to fulfill Biology elective requirements.
Group I: Medical Entomology (4060), Pathogenic Microbiology (4260)
Group II: Neuroethology (4180), Animal Behavior (4200)
Group III: Animal Physiology (4110), Neurophysiology (4180), Molecular Biotechnology (4210), Endocrinology (4380), Immunobiology (4390), Molecular Neurobiology (4400)
Biology Electives: Biology of Aging (3100), Topics in Biology (4000), Research in Biology (4010), Internship (4890), Seminar (4900)