

## **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 200*: Biology Today (1)  
*BIOL 204*: Concepts in Biology I (5)  
*BIOL 205*: Concepts in Biology II (5)  
*BIOL 350*: General Genetics (4)  
*CHEM 125, 127 & 128* or *135, 137 & 138*: General Chemistry (10)  
*CHEM 341, 344 & (345 or 346)*: Organic Chemistry (9-10)  
*MATH 131* or *134 & 135*: Calculus (5-6)  
*PHYS 201 & 202* 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 313*: Microbiology (4)  
*BIOL 331*: Human Anatomy & Physiology I (4)  
*BIOL 332*: Human Anatomy & Physiology II (4)  
*BIOL 405*: General Parasitology (4)

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

*BIOL 449*: Epidemiology (3)

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

*BIOL 407*: Cell Biology (4)  
*BIOL 408*: Molecular Biology (3)  
*BIOL 431*: Developmental Biology (3)  
*BIOL 401*: Independent Research (1-4)

**The following courses are also good choices to fulfill Biology elective requirements.**

*Group I*: Medical Entomology (406), Pathogenic Microbiology (426)

*Group II*: Neuroethology (418), Animal Behavior (420)

*Group III*: Animal Physiology (411), Neurophysiology (418), Molecular Biotechnology (421), Endocrinology (438), Immunobiology (439), Molecular Neurobiology (440)

*Biology Electives*: Biology of Aging (310), Topics in Biology (400), Research in Biology (401), Internship (489), Seminar (490)