

BIOMEDICAL SCIENCE COURSES (BIOM)

BIOM 240 **INTRODUCTION TO RESEARCH (1-3)** *Prerequisite: BIOL 111, 111L, 112, 112L, or consent of instructor.* This course provides the opportunity to conduct independent lab, field, or library research under the supervision of a faculty mentor. Credit is dependent on the scope of the work.

BIOM 301 **BIOMEDICAL SCIENCE SEMINAR (1)** *Prerequisite: Junior or senior standing or consent of instructor.* One hour lecture. Students meet for presentations (prepared by the students) on various aspects of careers and trends in the health-related professions. Topics may include ethics in medicine, current research problems in the health fields, health insurance options, job outlook predictions for various medical specialties, average QPA and MCAT scores for last year's entering class, demonstrations of interesting websites, and standardized test and interview preparation. Experimental design is also addressed. The grade is based on attendance, presentations, several short essays, and a final paper on which the student can base the essay required for professional school application.

BIOM 312 **FORENSIC SCIENCE (4)** *Prerequisites: Satisfactory completion of the following: CHEM 104, 106L, BIOL 112, 112L.* This course introduces the student to the forensic science profession. Course topics include crime scene investigation, techniques used for the identification and analysis of body fluids, hair, glass, fibers, latent fingerprints, firearms, and narcotics. Laboratory experiments emphasize the collection/preservation of evidence, serology, wet chemical techniques, microscopy, and the use of spectroscopic instrumentation.

BIOM 354 **IMMUNOLOGY (4)** *Prerequisite: BIOL 111/111L-BIOL 112/112L.* Three hours lecture and three hours laboratory. A study of the structure and function of the mammalian immune system from the perspective of cellular and developmental biology. This course will also address the biochemical and structural properties of antibodies and diseases of the immune system.

BIOM 380 **TOPICS IN BIOMEDICAL SCIENCE (3)** *Prerequisite: BIOL 111/111L-BIOL112/112L.* Three hours lecture. These topics are devoted to application of biomedical science to areas of specialty. Different topics may be available from time to time; consequently, more than one may be taken by a student during his/her matriculation.

BIOM 399 **INTERNSHIP IN A HEALTH PROFESSION (1-6)** *Prerequisites: Juniors or seniors with a 2.25 minimum QPA, approval of written proposal by internship coordinator, and supervising faculty prior to registration.* This internship provides practical experience in the health professions under supervision of a qualified professional. A final written report is required of the student intern. (See "Internships.")

BIOM 421 **RESEARCH PROJECT (3)** *Prerequisites: Senior standing; consent of faculty mentor and biomedical science program chair.* This course is a laboratory or field-based research project under the supervision of an appropriate faculty mentor. Students choose a research problem based on their own interest and collaboration with a faculty mentor. A written proposal and final report are required. Students present their work as directed by the faculty mentor.