BIOMEDICAL SCIENCE COURSES (BIOM)

BIOM 238 INTRODUCTION TO RESEARCH (1-3) *Prerequisite: Consent of supervising instructor.* This course provides the beginning student the opportunity to conduct 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) *Prerequisites: BIOL 111/111L-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 397 INDEPENDENT STUDY IN BIOMEDICAL SCIENCE (1-3) *Prerequisites: Approval of faculty sponsor and school dean; junior or senior standing.* This course provides students the opportunity to pursue individual study of topics not covered in other available courses. The area for investigation is developed in consultation with a faculty sponsor and credit is dependent on the nature of the work. May be repeated for no more than six credits.

BIOM 398 SPECIAL TOPICS IN BIOMEDICAL SCIENCE (1-3) [credit depends on topic] *Prerequisite: A background of work in the discipline or prior consent of instructor.* This course will focus on an aspect of the discipline not otherwise covered by the regularly offered courses. The topic will vary according to professor and term; consequently, more than one may be taken by a student during his/her matriculation.

BIOM 399 INTERNSHIP IN A HEALTH PROFESSION (1-12) *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 420 CANCER BIOLOGY (3) *Prerequisites: BIOL 111/111L, 112/112L.* Three hours lecture. This course will address current issues in cancer: the genesis and progression of a tumor, types of tumors, mechanisms of tumorigenicity and effective treatment strategies.

BIOM 428 INDIVIDUAL RESEARCH IN BIOMEDICAL SCIENCE (1-6) *Prerequisites: Junior or senior standing; consent of supervising instructor.* This independent opportunity to conduct a field, laboratory, or literary study project culminates in a formal paper and/or presentation as directed by the supervising instructor. Credit is dependent on the nature of the work but may not exceed three credit hours per semester.