Microbiology (MBIO)

Courses

MBIO 202. Introductory Medical Microbiology Lecture. 3 Credits.
An introductory medical microbiology course primarily for nursing and clinical lab science students but open to allied health students with permission of the instructor. This course provides a background in all aspects of microbial agents and disease. Three hours lecture per week. Prerequisite: CHEM 116 or CHEM 121 with a grade of C or higher. F.

MBIO 202L. Introductory Medical Microbiology Laboratory. 2 Credits.
An introductory laboratory course in the isolation and identification of all types of microorganisms with an emphasis on those that cause disease. Four hours laboratory per week. Prerequisite: CHEM 116 or 121 with a grade of C or higher. Corequisite: MBIO 202. F.

MBIO 302. General Microbiology Lecture. 2 Credits.
An introduction to general microbiology with emphasis on the morphology, classification, and physiology of bacteria, fungi, parasites, and viruses. The significance of microorganisms in food processing, waste disposal, and in maintaining our environment is discussed. Two hours lecture per week. Prerequisites: BIOL 150 and CHEM 116 or CHEM 121, with a grade of C or better in both prerequisite courses or permission of instructor. S.

MBIO 302L. General Microbiology Laboratory. 2 Credits.
The growth, isolation, and identification of microorganisms from a variety of sources using procedures such as staining, microscopy, pure culturing, and biochemical tests. Four hours laboratory per week. Prerequisite or Corequisite: MBIO 302. S.

MBIO 328. Introduction to Immunology. 3 Credits.
An introduction to the fundamentals of immunology including immunochemistry, humoral and cellular response, hypersensitivity, immunodeficiency, immunogenetics, tolerance and immunodiagnosis. Prerequisite: A grade of C or higher in BIOL 150 or BIOL 151 or BMB 301. F.

MBIO 507. Seminar in Microbiology. 1 Credit.
S/U grading. F.

MBIO 511. Microbiology and Immunology Literature. 1 Credit.
A series of reports of current scientific literature in Microbiology and Immunology. S/U grading. S.

MBIO 513. Research Tools. 2 Credits.
Orientation to research and laboratory safety. The theory and application of modern laboratory techniques include tissue culture, cell fractionation, enzyme assay, immunization procedures, bacterial growth curves, photomicrography, strain construction, genetic engineering, gel electrophoresis, enzyme immunoassay, and western blot techniques are presented. S/U grading. F.

MBIO 515. Advanced Topics. 2 Credits.
A series of topics in microbiology and immunology presented on an episodic basis. The topics may vary, but are expected to include: (A) Immunology, (B) Infectious Diseases, and (C) Molecular Biology. Prerequisite: Previous basic course in the area to be covered.

MBIO 590. Research in Microbiology. 2-6 Credits.
Advanced problems in microbiology and related fields. Hours arranged. Repeatable.

MBIO 591. Special Problems in Microbiology. 1-6 Credits.
Short-term research projects.

MBIO 996. Continuing Enrollment. 1-12 Credits.
Repeatable. S/U grading.

MBIO 997. Independent Study. 2 Credits.
Repeatable to 8 credits.

MBIO 998. Thesis. 1-8 Credits.
Repeatable to 8 credits.

MBIO 999. Dissertation. 1-15 Credits.
Repeatable to 15 credits.