

MICROBIOLOGY (MICR)

MICR 1103. Microbiology & Immunology. (5 Credit Hours)

Basic principles and clinical relevance of immune mechanisms and fundamentals of host-pathogen interactions are presented. In addition, the course offers an introduction to the various subdisciplines of microbiology, with emphasis on facts and principles pertinent to the broad requirements for understanding infectious diseases. Bacterial, mycotic, parasitic and viral pathogens are considered, with major emphasis on clinical presentation and pathogenic mechanisms. Laboratory integration focuses on the common diagnostic modalities pertinent to the various infectious agents.

MICR 1104. Immunology. (1.5 Credit Hours)

The course begins with the fundamentals of the immune system and transitions into the normal functioning of the immune response and the mechanisms behind immunopathologic conditions. Basic principles and clinical relevance of immune mechanisms are also emphasized. Exercises that link course content to research laboratory applications will be provided throughout the course.

Prerequisite: Consent of Instructor

MICR 1109. General Pathology. (2.5 Credit Hours)

Pathology is a medical science, and specialty practice, concerned with all aspects of disease, but with special reference to the essential nature, causes, and development of abnormal conditions, as well as the structural and functional changes that result from the disease processes.

MICR 2124. Infectious Disease. (1.5 Credit Hours)

Emphasizes the major infectious diseases in terms of etiology, epidemiology, treatment, control and prevention. These diseases are discussed by individuals in the fields of microbiology, primary care, and infectious diseases. The combination of didactic and case-based instruction will provide exposure to the basic science and clinical aspects of infectious diseases.