

BMS 5060 : Microbiology and Infectious Diseases

This course introduces graduate students to fundamental principles of microbiology including microbial structure/diversity, microbial metabolism and pathogenicity, and classes and actions of antimicrobial drugs. This overview includes discussions of the interaction between pathogen and host during the infectious process and adaptations by the pathogens to overcome or evade the immune system and cause human disease. Representative microorganisms belonging to each class of pathogen (bacterial, viral, fungal, and parasitic) are discussed. Other topics will include emerging diseases, public health epidemiology, vaccines, antimicrobial resistance, and eradication of disease. A combination of methods will be used to deliver material including, but not limited to, didactic lectures, small group work, and case studies/applications.

Credits 3

Prerequisites

None