

BIO 307: Microbiology

Are you fascinated by the incredible way the tiniest organisms (microorganisms) can impact our lives? They are small but mighty impacting health (human and animals), environment, food, energy, water, and industries. This course begins with an overview of microbial groups, their physiology, growth, metabolism, and genetics. We will learn how these concepts enable microbes to cause disease and how they can be controlled. The understanding of how microbes feed, grow, utilize nutrients, acquire and alter their genes, and the ability to function effectively as pathogens will provide the foundation in microbiology for the subsequent study of infectious diseases, their use in sustaining the environment, food production, and safety and the synthesis of various useful products. The laboratory sessions will equip students with basic technical skills required for growing, identifying, and studying antibiotic sensitivity of microorganisms using cultural, microscopic, biochemical, and molecular methods.

Units: 3

Prerequisites:

[\[CHEM 150](#) and IBC 200] or [BIO 141](#).

Program: [Biology](#)