

MICROBIOLOGY (MICR)

MICR 1 Principles of Microbiology

5 Units (Degree Applicable, CSU, UC)

UC Credit Limitation

Lecture: 54 Lab: 108

Prerequisite: *CHEM 10 or CHEM 40*

Fundamental concepts of microbiology with emphasis on bacteria. Survey of microbial classification, morphology, physiology, and genetics; beneficial and pathological aspects; growth and control of microbes; virology, immunology, and host-microbe interactions. Important infectious diseases of humans are surveyed. Laboratory exercises examine microbial morphology, physiology, and genetics as well as environmental influences of microorganisms. Laboratory techniques include culturing, examining, and identifying microorganisms. Field trips are required.

MICR 22 Microbiology

4 Units (Degree Applicable, CSU, UC)

UC Credit Limitation

Lecture: 54 Lab: 54

Prerequisite: *CHEM 10 or CHEM 40*

Advisory: *BIOL 1 or BIOL 4 or BIOL 4H*

Fundamental concepts of microbiology including viruses, bacteria, fungi, protozoa and parasitic worms.

MICR 26 Introduction to Immunology

3 Units (Degree Applicable, CSU, UC)

Lecture: 54

Prerequisite: *MICR 1 or MICR 22*

Advisory: *BIOL 1 or BIOL 4 or BIOL 4H*

Immunology including principles of innate and adaptive immunity, B and T lymphocyte structure, function, and development, the major histocompatibility complex, immune system errors, and applications and techniques in the immunology field as they pertain to medical diagnostics, immunohistochemistry, and biotechnology.