

MICROBIOLOGY

MICR R100 Principles of Microbiology 3 Units

In-Class Hours: 52.5 lecture

Prerequisites: Course taught at the level of intermediate algebra or placement as determined by the college's multiple measures assessment process and CHEM R104 (or higher) and ANAT R101 and PHSO R101 and BIOL R101 or BIOL R101H or BIOL R120

This course is an introduction to the structure, metabolic activities, utility and pathogenicity of bacteria, fungi, algae, protozoa and viruses. The topics will include distribution, metabolism, molecular genetics, biotechnology, immunity, cancer, probiotics and the physical/chemical methods used in control of microbes and cellular pathogens. The principles of disease transmission, prevention and immunity will also be presented. The diversity of the microbial world and its applications to improving human health and quality of life are emphasized.

Advisories/Rec Prep: ENGL R101

Grade Modes: Letter Graded

Degree Applicability: Applies to Associate Degree

AA/AS GE: A1

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: B2

IGETC: 5B

MICR R100L Principles of Microbiology Laboratory 2 Units

In-Class Hours: 105 laboratory

Prerequisites: MICR R100 or concurrent enrollment

This course is an introduction to the structure, metabolic activities, utility and pathogenicity of bacteria, fungi, algae, protozoa and viruses. The topics will include distribution, metabolism, molecular genetics, biotechnology, immunity, cancer, probiotics and the physical/chemical methods used in control of microbes and cellular pathogens. The principles of disease transmission, prevention and immunity will also be presented. The diversity of the microbial world and its applications to improving human health and quality of life are emphasized.

Grade Modes: Letter Graded

Degree Applicability: Applies to Associate Degree

AA/AS GE: A1

Transfer Credit: CSU, UC

UC Credit Limitations: None

CSU GE-Breadth: B3

IGETC: 5C

MICR R199 Directed Studies in Microbiology Related Topics 1-3 Units

In-Class Hours: 52.5-157.5 laboratory

Prerequisites: BIOL R100 and BIOL R100L; or BIOL R101 and BIOL R101L; or, MST R100 and MST R100L; or, BIOL R120 and BIOL R120L

Designed for students interested in furthering their knowledge of Microbiology on an independent study basis. These studies may require a combination of laboratory and library research. Project findings will be presented in a scientific poster format, video, protocol or research publication.

Catalog Notes: Undergraduate Research in Molecular Microbiology and Genetics.

Grade Modes: Letter Graded

Field Trips: May be required

Degree Applicability: Applies to Associate Degree

AA/AS GE: None

Transfer Credit: CSU

UC Credit Limitations: None

CSU GE-Breadth: None

IGETC: None