

# BIO 208 - MICROBIOLOGY

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- Research academic and popular resources to make reasoned conclusions.

## Course Description

This course reviews the two types of cells (prokaryotic and eukaryotic). Microbial anatomy, physiology, and diversity are introduced. Microbiological disease pathology and the role of microbes in food production are also discussed. This class includes an oral presentation on a disease caused by microbes. Laboratory work culminates with the identification of an unknown bacterial solution. Group 1 lab course.

## Credit Hours

4

## Contact Hours

6

## Lecture Hours

3

## Required Prerequisites

Completion of any 100-level BIO course

## Corequisites

BIO 208L

## Recommended Prerequisites or Skills

## Competencies

ENG 111, MTH 111

## General Education Outcomes supported by this course

Quantitative Reasoning

## Course Learning Outcomes

### Knowledge:

- Describe the following core concepts: Evolution in organisms, Structure and function, Information flow-exchange and storage, Pathways and transformation of energy and matter, Living systems.

### Application:

- Apply the process of science in relation to the interaction of microorganisms, plants, animals and the environment.

### Integration:

- Use principles of several natural science disciplines to integrate basic cell physiological processes and mathematical modeling related to growth and decay.

### Human Dimension:

- Explain the importance of microorganisms in both human health and disease.
- Explain the importance of microorganisms in ecological health and disease.
- Collaborate with peers and the instructor to help each other learn.

### Caring - Civic Learning:

- Develop a curiosity about the natural world and their responsibility in using sustainable resources.

### Learning How to Learn: