

# Spokane Community College

## COURSE LEARNING OUTCOMES (CLO) AND OUTLINE

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**Course Title: Microbiology**

**Prefix and Course Number: BIOL& 260**

**Version Date: 1/2/2025**

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### Course Learning Outcomes

By the end of this course, a student should be able to:

1. Apply microbiological concepts to real-world healthcare situations.
2. Explain the evolutionary processes (mutation, natural selection, horizontal gene transfer, recombination, reassortment) that drive microbial diversity.
3. Effectively communicate microbiology concepts to audiences.
4. Discuss microbial interactions within the context of a diverse human population.
5. Interpret numerical data to inform hypothetical clinical decisions.
6. Demonstrate the ability to execute microbiology laboratory protocols.

### Course Outline:

1. Concepts and Tools for Studying Microbiology
2. Introduction to Microbes
3. Cell Structure and Function
4. Microbial Growth and Nutrition
5. Microbial Genetics and Metabolism
6. Viruses and Prions
7. Infectious Disease
8. Epidemiology
9. Host-Microbe Interactions and Pathogenesis
10. Immune System
11. Biomedical Applications
12. Control of Microorganisms
13. Antimicrobial Drugs