

Microbiology

Scope and Sequence

- Introduction
- What is Microbiology?
 - A Brief History of Microbiology
 - How do Germs Spread?
- Different Kinds of Germs
 - Which Germs Cause Which Disease?
 - What are Viruses?
 - Viral Infections
 - Beneficial Viruses?
 - What are Prokaryotes?
 - Prokaryotic Cell Walls
 - Optional Lab Activity: Gram Stain
 - Bacterial Flagella
 - Bacterial Growth and Reproduction
 - Activity: Calculating Bacterial Growth
 - Optional Lab Activity: Preparing Agar Petri Dishes
 - Optional Lab Activity: Where are Bacteria Found?
 - Beneficial Prokaryotes
 - Pathogenic Bacteria
 - Recovering from Infections
 - Antibiotics
 - What are Fungi?
 - Optional Lab Activity: Viewing Budding Yeast Under the Microscope
 - Beneficial Fungi
 - Optional Lab Activity: The Effect of Sugar Levels on Yeast Fermentation
 - Pathogenic Fungi
 - What are Protozoa and Algae?
 - Optional Lab Activity: Observing Microscopic Life in Water Samples
 - Beneficial Protists
 - Pathogenic Protists
- Conclusion
 - What Can You Do with a Microbiology Degree?