



Microbiology Fundamentals: A Clinical Approach

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Overview

Cowan's Microbiology Fundamentals: A Clinical Approach is a perfect fit for your microbiology course. The author team includes a practicing Registered Nurse who shows students how the content on each page relates to their lives and future career. McGraw Hill Connect® is aligned with the text and provides a highly reliable, easy-to-use homework and learning management solution that embeds learning science and award-winning adaptive tools to improve student results.

What You Need to Know

Clinical Case Files

Begin each chapter by showing how the chapter is relevant to students in future healthcare careers.

NCLEX Prep Questions

Found throughout the chapter, these questions help students think critically and apply concepts.

Medical Moment Boxes

Give students a detailed application of a nearby concept in the chapter.

The Microbiome

Each chapter ends with a reading about a microbiome discovery or story that's relevant to the chapter.

Depth of Topic Coverage

Low High

Writing Style

Approachable and Digestible

Course Level

Allied Health | Nursing Focus

Duration of Course

1 Semester

Table of Contents

1. Introduction to Microbes and Their Building Blocks
2. Tools of the Laboratory: Methods for the Culturing and Microscopic Analysis of Microorganisms
3. Bacteria and Archaea
4. Eukaryotic Cells and Microorganisms
5. Viruses and Prions
6. Microbial Nutrition and Growth
7. Microbial Metabolism
8. Microbial Genetics and Genetic Engineering
9. Physical and Chemical Control of Microbes
10. Antimicrobial Treatment
11. Interactions Between Microbes and Humans
12. Host Defenses I: Overview and Innate Defenses
13. Host Defenses II: Adaptive Immunity and Immunization
14. Disorders in Immunity
15. Diagnosing Infections
16. Infectious Diseases Affecting the Skin and Eyes
17. Infectious Diseases Affecting the Nervous System
18. Infectious Diseases Affecting the Cardiovascular and Lymphatic Systems
19. Infectious Diseases Affecting the Respiratory Systems
20. Infectious Diseases Affecting the Gastrointestinal Tract
21. Infectious Diseases Affecting the Genitourinary System
22. One Health: The Interconnected Health of the Environment, Humans, and Other Animals



This Title has Gone Evergreen

This title is transitioning to an evergreen delivery model. This means you will have the most relevant and up-to-date content, tools, and accessibility delivered directly to your existing McGraw Hill Connect® course, all without switching editions or building a new course from scratch. If you use the McGraw Hill eBook, your content will be updated automatically. Please talk to your representative about your options if you require a print component.

A complete list of Release Notes for this title is available within your Connect course at connect.mheducation.com

Big Changes in this Release

✓ COVID-19 Content

Used in all chapters as an illustration of the sometimes-esoteric concepts in a way that has immediacy for students.

✓ New Epidemiological Information

In each disease chapter Case-fatality rates, reproduction numbers, and herd-immunity thresholds are included for each infection for which they are known.

✓ Renewed Emphasis on Diversity, Equity, and Inclusion

More diversity is represented, and nonbinary and religiously diverse people are included. Information about non-Western scientists has been included.

✓ Color Contrast and Accessibility

In every chapter we have improved the colors and contrasts of labels and other details to assist readers who have variations in visual acuity and color vision and to make details more visible in classroom projection.

✓ Connect Updates

18 new Biochemical Test VL adaptive pre-lab/post lab assessment banks, New Microbiome Relevancy Module, New 50 HESI (Health Education System Inc.) bank of questions found in the coursewide bank, 20+ New and updated Animations with assessment found in the eBook and Question Bank with assessment content.