

Virginia Western Community College
SUR 135
Infection Control

Prerequisites

BIO 141/142, ITE 102, ENG 111, SDV 101, HLT 143

Course Description

Introduces the fundamentals of surgical microbiology. Includes an introduction to cell structure and theory, microbial function, human pathogen relationships, infectious process, blood borne and airborne pathogens, defense microorganisms, infection control, and microbial control and destruction.

Semester Credits: 2

Lecture Hours: 2

Required Materials

Textbook:

Microbiology for Surgical Technologist. Margaret H. Manning Rodriguez, 3rd edition, Elsevier ISBN: 978-0-357-62615-3

Other Required Materials:

Surgical Technology for the Surgical Technologist: A Positive Care Approach Cengage ISBN: 978-1-305-95641-4

Study Guide to Accompany Surgical Technology for the Surgical Technologist Workbook ISBN: 978-1-30-595643-8

Course Outcomes

- Identify various microbes and the method of destruction for those microbes
- Relate the study of microbiology and the process of infection to surgical practice. Describe and discuss the phases of infection as they relate to bacteria while able to describe types of disease-causing microbes.
- Demonstrate knowledge of blood borne pathogens and air borne pathogens
- Demonstrate knowledge of self-protection with protective wear

Topical Description

Module Criteria/ Topics
<p><u>Module 1</u></p> <p>Ch 1: Introduction to Microbiology</p> <p>Ch 2: The Science of Microbiology</p> <p>Ch 3: The Microbiology Laboratory</p>

Module 2

Ch 4: The Prokaryotes
Ch 5: The Eukaryotes
Ch 6: Microbial Viability and Growth
Ch 7: Microbial Genetics and Mutations

Module 3

Ch 8: The Empire of Viruses
Ch 9: Microbial Disease Transmission
Ch 10: Parasites and Vectors
Ch 11: Mycology

Module 4

Ch 12: Gram- Positive Cocci
Ch 13: Gram- Positive Bacilli
Ch 14: Actinobacteria

Module 5

Ch 15: Gram- Negative Cocci and Spirochetes
Ch 16: Gram- Negative Bacilli and Coccobacilli
Ch 17: Diseases of Circulatory and Central Nervous Systems
Ch 18: Diseases of the Skin and Internal Tissues

Module 6

Ch 19: Diseases of the Gastrointestinal and Genitourinary Systems
Ch 20: Diseases of the Eyes, Ears, and Respiratory System
Ch 21: Control of Microbial Growth
Ch 22: Emerging, Recurring, and Reappearing Diseases