

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
<u>Module 1</u> Ch 1: Introduction to Microbiology Ch 2: The Science of Microbiology Ch 3: The Microbiology Laboratory
<u>Module 2</u> Ch 4: The Prokaryotes Ch 5: The Eukaryotes Ch 6: Microbial Viability and Growth Ch 7: Microbial Genetics and Mutations
<u>Module 3</u> Ch 8: The Empire of Viruses Ch 9: Microbial Disease Transmission Ch 10: Parasites and Vectors Ch 11: Mycology
<u>Module 4</u> Ch 12: Gran- Positive Cocci Ch 13: Gram- Positive Bacilli Ch 14: Actinobacteria
<u>Module 5</u> 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
<u>Module 6</u> 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