

**SRTC 230**  
**Surgical Microbiology**  
2 Credits

Community College of Baltimore County  
Common Course Outline

**Description**

**SRTC 230 – Surgical Microbiology:** enables students to learn the basic concepts of microbiology and how it relates to the surgical environment. Students discuss the basic concepts of disease processes and how they relate to infections. Topics to be covered include organism identification, human defense mechanisms, tools used in microbiology, and the relation of microbes to infection prevention in the operating room.

**Pre-requisites:** SRTC 201

**Overall Course Objectives**

Upon completion of this course, students will be able to:

1. correlate the impact of microbiology in relationship to the practice of sterile technique and infection control in the operating room;
2. differentiate organism classification;
3. describe components of the cell;
4. discuss methods of identifying microbes;
5. identify basic components of biological microscopes;
6. define the basic function of biological microscopes;
7. evaluate the phases and types of infections;
8. categorize types of microorganisms and the diseases they cause; and
9. list the body's defense mechanisms against infection.

**Major Topics**

- I. Classification of organisms
  - a. Eukaryotic
  - b. Prokaryotic
- II. The cell
  - a. Cell components
  - b. Cell identification
- III. Methods for identifying microbes
  - a. Culture
  - b. Staining
  - c. Microscope
- IV. Microbial role in infections
  - a. Chain of infection
  - b. Phases of infection
  - c. Hospital acquired infections

The Common Course Outline (CCO) determines the essential nature of each course.  
For more information, see your professor's syllabus.

- d. Disease prevention
- V. Microorganisms and the diseases they cause
  - a. Bacteria
  - b. Viruses
  - c. Prions
  - d. Fungi
  - e. Protozoa
- VI. Immunity
  - a. Innate
  - b. Adaptive
  - c. Active
  - d. Passive
  - e. Vaccines
  - f. Hypersensitivity
  - g. Allergy
  - h. Autoimmunity

### **Course Requirements**

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Weekly assignments
- Weekly quizzes
- Weekly discussion boards
- Three exams
- Professionalism
- Final examination

Date Revised: 10/5/2021

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