

SRG 102 - SURGICAL MICROBIOLOGY

Course Description

Students in this course will learn about the cell, cell organelles and processes, and transport. This course will also cover varying types of organisms that cause infection, the infection process, and microbe identification. The body's natural defense system, as well as common bacteria, viruses, and fungi that cause disease, will be covered including the response. Current and emerging global diseases that have the potential to reach or at current epidemic, endemic, or pandemic levels will be discussed including COVID-19. Group 2 course.

Credit Hours

1.5

Contact Hours

1.5

Lecture Hours

1.5

Required Prerequisites

SRG 101, SRG 101L, and SRG 103 may be taken concurrently

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

- Explain the different classification of organisms and the binomial system.
- Describe components of the cell and cell transport.
- Describe the methods of identifying microbes.
- Identify the basic components of a biological microscope.
- Describe blood-borne pathogens.
- Describe the phases of types of infections.
- Describe types of bacteria, viruses, prions, fungi and protozoa and the diseases they cause.
- Explain the significance of multidrug-resistant organisms.
- Describe the body's defense mechanisms against infection.
- List the ways a person acquires immunity to pathogenic organisms.
- Identify the differing types of disinfectants and how and what organisms they destroy.
- Describe the process of disinfection as it pertains to fomites.

Application:

- Determine the appropriate steps to prevent infection.

Integration:

- Relate the study of microbiology and the process of infection to surgical practice.
- Relate a good surgical outcome to the patient's immune response.

Human Dimension:

- See their role in the process of patient infection and how they truly affect the outcome of their patient's health, either positively or negatively.

Caring - Civic Learning:

- Identify components relating to gender, race, cultural practices, and social status that affect patient outcomes with respect to infection and wound healing.

Learning How to Learn:

- Learn how to seek resources concerning information on chemicals used in the operating room for safe use.