Miami Dade College

Course Description

STS1303 | Fundamentals of Surgical Technology | 3.00 credits

This course introduces the discipline of surgical technology and the role of the surgical technologist in preventing perioperative disease transmission and microbiology to include the characteristics and activities of microorganisms. It surveys the various microbial groups, especially the bacteria, viruses, and fungi, with emphasis on pathogenic forms. Various significant aspects of infectious diseases that occur in humans are also covered. The course will also include an introduction to principles of perioperative care, asepsis/infection control, proper disinfection, assembly, and sterilization processes for instrumentation following surgical procedures.

Course Competencies

Competency 1: The student will demonstrate prevention of perioperative disease transmission by:

1. Describing the importance of sterility as it applies to the surgical patient
2. Explaining the transmission of contamination as it applies to the surgical patient
3. Explaining what constitutes contamination

Competency 2: The student will understand the significance of microorganisms and the role of the surgical technologist regarding aseptic technique as it applies in the operating room by:

1. Comprehension of microorganism transmission to surgical patients
2. Describing the role of the surgical technologist in preventing transmission of bacteria and microorganisms
3. Describing the various pathogens transmittable to patients in the operating room

Competency 3: The student will demonstrate knowledge of asepsis and surgical sterility for patient outcomes and best practices with regard to instrumentation and sterilization by:

1. Describing the importance of sterilization of instrumentation with regard to microbial contamination
2. Explaining the process of sterilization of surgical instrumentation
3. Explaining the process by which surgical instruments are processed and sterilized for patient safety

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Demonstrate knowledge of ethical thinking and its application to issues in society
- Describe how natural systems function and recognize the impact of humans on the environment