

Course Description

STS2179 | Surgical Biomedical Fundamentals | 3.00 credits

This course teaches the skills necessary to function as a surgical technologist in the operating room including principles of aseptic technique, and a basic understanding of robotics and their use in the operating room setting. In addition, an understanding of the principles of physics and electricity as it relates to the operating room environment will be covered.

Course Competencies

Competency 1: The student will demonstrate the aseptic technique as it applies to the operating room by:

1. Identifying rules of aseptic technique
2. Explaining universal precautions as it relates to the operating room
3. Describing the purpose and use of personal protective equipment

Competency 2: The student will understand electrical, and power equipment used in surgery by:

1. Explaining safety precautions on electrical equipment
2. Describing the understanding of an electrical circuit with electrocautery
3. Demonstrating safety procedures when connecting and disconnecting all electric and power equipment in surgery

Competency 3: The student will understand electricity and fire safety in the operating room by:

1. Describing the process of broken or damaged equipment in surgery
2. Understanding the use of an electrocautery machine
3. Describing the surgical technologist's role in a surgical fire

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Demonstrate knowledge of ethical thinking and its application to issues in society