## SRG 103 - SURGICAL PHARMACOLOGY

### **Course Description**

In this course students will learn the pharmaceuticals used in surgical practice to include their actions, use, effects, contraindications and administration. The anesthesia process will be covered in defining the stages of general anesthesia as well as the different types of agents used. The course will cover the equipment, safe practices, sterile technique and terminology used in relation to pharmacology. Students will also cover practices relating to alternative therapies such as herbal medication, acupuncture, massage, and music therapy and their effect on the surgical patient. Group 2 course.

### **Credit Hours**

1.5

### **Contact Hours**

1.5

### **Lecture Hours**

1.5

### **Required Prerequisites**

SRG 101, SRG 101L, and SRG 102 may be taken concurrently

# General Education Outcomes supported by this course

Critical Thinking - Direct

### **Course Learning Outcomes**

#### Knowledge:

- · Define terms and abbreviations related to pharmacology.
- Identify the origins of, classification system, and types of pharmacologic agents used in surgical practice.
- Detail the varying drug forms, administration pathways, and distribution systems.
- Identify the international, federal, state and local regulation of drugs as well as development and testing.
- Describe the principles of pharmacokinetics and pharmacodynamics.
- · Identify terms, stages and drugs used in the anesthesia process.
- Define emergency situations, the role of the surgical technologist during, and the drugs that may be utilized during an emergency.
- Identify the types of integrated health practices that may be used in the perioperative setting and describe their indications for use.
- Define the term dietary supplement and explain the FDA oversight of dietary supplements.
- Identify challenges with pharmaceutical use based on religious, cultural, personal, gender, or racial concerns.

#### Application:

- Determine the most appropriate risk-reduction or patient education strategies for patients considering complementary or alternative medicine.
- Apply safe practices to prevent needlesticks in the operating room environment.

#### Integration:

- Compare and contrast the differing roles between the licensed and non-licensed individual in the operating room and their roles in distributing medication in the surgical field.
- Connect the relationship between the use of alternative therapies and the field of surgery.

#### Human Dimension:

• Develop a sense of responsibility to the patient concerning safe practices relating to pharmaceutical use in the operating room to eliminate errors.

#### Caring - Civic Learning:

• Engage with fellow students to relay the importance of pharmaceutical safety within the surgical environment and the importance of practicing sharp safety.

#### Learning How to Learn:

• Identify sources of information on pharmaceuticals used in surgery available to the student to assist the student with being successful on the certification exam.