

## **SURG-244 PHARMACOLOGY AND ANESTHESIA**

3 CREDITS

### **SYLLABUS**

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#### **CATALOG DESCRIPTION**

This course is designed to introduce students to most commonly used pharmacological agents utilized for surgical patients in each phase of the perioperative experience and those utilized in the treatment of complications and emergencies. Emphasis is placed on preoperative medications, anesthetics and medications utilized within the sterile field stressing identification, preparation, measurements, management within the sterile field, handling/transfer, and usage. Other topics include pain management, airway and respiratory management, IV fluid and electrolyte replacement therapy, and a comparison of the types of anesthesia, physiological effects, complications and treatment.

Prerequisites: SURG 229, SURG 230, SURG 233, SURG 234, SURG 235

Semester Offered: Fall / Spring Semester

#### ***COMMON STUDENT LEARNING OUTCOMES***

*Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...*

##### **BROAD AND SPECIALIZED LEARNING**

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

##### **CRITICAL THINKING**

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

##### **CULTURAL AND CIVIC ENGAGEMENT**

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

##### **EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

##### **INFORMATION LITERACY**

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

##### **INTEGRATING TECHNOLOGIES**

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

#### **COURSE LEARNING OUTCOMES**

*Upon successful completion of the course, the student will be able to:*

1. Discuss Key Terms in Pharmacology, Laws, Publication, and Violations
2. Discuss Dimensional Analysis, Identification and Classification, and Sources
3. Determine Routes of Administration, Pharmacokinetics, Pharmacodynamics, and Drug Handling
4. Describe Medication Commonly used in the Surgical Environment
5. Applies Basic Math
6. Discuss Pharmacokinetics Absorption, Distribution, and Biotransformation
7. Discuss medications commonly use the surgical Environment Anesthesia Agents, Antineoplastic, Blood Replacement, Hemostatic agents, Emergency Drugs , Irrigations Solutions, Narcotics, and Sedatives.