SRTC 101

Surgical Pharmacology

2 Credits

Community College of Baltimore County Common Course Outline

Description

SRTC 101 – Surgical Pharmacology: introduces students to the practical concepts of anesthetic agents and other drugs commonly used in the perioperative setting. Topics include the uses of the agents and drugs, the various methods of administration, physiologic effects, medication conversions and dosages, and hazards or unforeseen effects.

Pre-requisites: Admission to the Surgical Technology program

Overall Course Objectives

Upon completion of this course, students will be able to:

- 1. define general terminology of anesthesia and medication administration;
- 2. list the principles of anesthesia administration;
- 3. identify the methods, agents, and techniques of anesthesia preparation of the surgical patient used to achieve surgical anesthesia;
- 4. differentiate the necessity of each component of anesthesia preparation of the surgical patient;
- 5. identify pharmacologic agents that are commonly used in the operating room or that are specifically related to perioperative care;
- 6. list anesthesia complications and interventions; and
- 7. solve basic medication conversions and dosages.

Major Topics

- I. Anesthesia general definitions
 - a. Pharmacology
 - b. Pharmakinetics
 - c. Pharmacodynamics
- II. Medication definitions
 - a. Nomenclature
 - b. Classification
 - c. Violations
 - d. Routes of administration
 - e. Drug forms
- III. Types of medication
 - a. Actions
 - b. Therapeutic actions
 - c. Effects
- IV. Medications used in surgery
 - a. Classifications of agents

The Common Course Outline (CCO) determines the essential nature of each course. For more information, see your professor's syllabus.

- b. Alternative medications
- V. General anesthesia
 - a. Patient monitoring
 - b. Phases and stages of general anesthesia
 - c. Anesthetic agents
- VI. Local anesthesia
 - a. Delivery methods
 - b. Local and topical agents
- VII. Complications of anesthesia
 - a. Allergic
 - b. Aspiration
 - c. Laryngospasm/bronchospasm
 - d. Malignant hyperthermia
 - e. Shock
 - f. Cardiac
- VIII. Medication measurements
 - a. Conversion and equivalent tables
 - b. Dosage calculations
 - c. Mixing medications

Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- Weekly assignments
- Weekly quizzes
- Three exams
- Professionalism
- Comprehensive final examination

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