



**BAKER COLLEGE**  
**STUDENT LEARNING OUTCOMES**

**SUR2350 Surgical Pharmacology and Anesthesia**  
**2 Semester Hours**

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**Program Goals**

To prepare competent entry-level surgical technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.

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**Student Learning Outcomes & Enabling Objectives**

1. Examine the importance of patient assessment to determine anesthesia choice.
  - a. Identify patient factors that impact anesthesia choice.
  - b. Identify the type of procedure being performed.
  - c. Discuss surgeon and patient preferences regarding anesthesia choice.
  - d. Discuss the choice of anesthesia administration.
  - e. Describe the preoperative medication of the patient and the effect on anesthesia choice.
2. Explore how to prepare and manage medications and solutions.
  - a. Discuss the surgical team member's roles involved with the care and handling of medications.
  - b. Explain the importance of documentation when administering medication.
  - c. Explain the importance of the packaging and labeling of medication.
  - d. Explain the importance of properly measuring medications.
  - e. Identify various medications used during surgery, including:
    - i. Nomenclature
    - ii. Concentration
    - iii. Storage
  - f. Calculate medication conversions and dosages.
  - g. Identify governmental rules and regulations of medications.
  - h. Describe how to properly care and handle medications and solutions in a sterile field.
3. Explore the various medications used in surgery.
  - a. Use appropriate medical terminology.
  - b. Identify the classification of medications and solutions.
  - c. Explain the routes of administration of medications.
  - d. Explain the different forms of drugs.
  - e. Describe the sources of medications.
  - f. Describe the processes involved with pharmacokinetics.
  - g. Describe the processes involved with pharmacodynamics.
  - h. Discuss various alternative medications and their uses.

4. Compare and contrast methods, agents, and techniques of anesthesia administration and preparation.
    - a. Define the term anesthesia.
    - b. Identify the difference between Analgesia and anesthetic.
    - c. Explore general anesthesia.
    - d. Explore regional anesthetic.
      - i. Spinal
      - ii. Epidural
      - iii. Nerve block
      - iv. Bier block
    - e. Explore local anesthesia.
    - f. Discuss patient monitoring devices used in anesthesia and their relationship to patient homeostasis.
  5. Describe complications and interventions of anesthesia.
    - a. Describe the importance of patient safety.
    - b. Explain the impact of anesthesia complications.
    - c. Describe the surgical technologist's role during anesthesia complications.
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## **Big Ideas and Essential Questions**

### **Big Ideas**

- Medication used in Surgery
- Medications
- Assessment of the patient
- Anesthesia

### **Essential Questions**

1. Why is it necessary to use different anesthesia?
  2. How does anesthesia affect the surgical patient?
  3. What is your role in anesthesia?
  4. Why is it important to understand how drugs affect the body?
  5. Why is it important to understand the care and handling of medication in the operative setting?
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These SLOs are not approved for experiential credit.

**Effective: Fall 2017**