



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

**SUR 2050 Advanced Asepsis**  
**2 Semester Hours**

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**Student Learning Outcomes & Enabling Objectives**

1. Apply patient confidentiality and safety standards/techniques to electronic patient records.
  - a. Describe the use of electronic patient records by the Surgical Technologist for pre-operative and intraoperative planning.
  - b. Explain the application of HIPAA as it pertains to electronic patient records.
2. Evaluate the surgical applications of robotics.
  - a. Identify the basic components of equipment used in robotic surgery.
  - b. Apply the principles of robotics to patient safety.
3. Assess the function, assembly, use, safety measures and care of the equipment in the surgical environment including:
  - a. Lasers
  - b. Electrosurgical Units
  - c. Harmonic Scalpel
  - d. Aquamantys System
  - e. Specialty equipment
  - f. Accessory Equipment
4. Evaluate the procedure for specimen validation and removal from operating room.
  - a. Distinguish different methods of obtaining specimens
  - b. Describe labeling requirements
  - c. Describe container specifications
  - d. Examine handling and preservation methods
  - e. Discuss transport methods and requirements
  - f. Discuss the implications for improper specimen handling and identification.
5. Evaluate the principles of hemostasis.
  - a. Discuss the natural clotting process
  - b. Differentiate between various methods of hemostasis
  - c. Demonstrate electrical knowledge as it relates to patient safety during the use of thermal hemostatic methods
  - d. Describe the role of the surgical technologists in hemostasis
6. Compare and contrast the types and characteristics of various catheters, drainage devices and tubes.
  - a. Describe the differences between passive and active drainage systems
  - b. Demonstrate the technique for preparation of catheters and drains intraoperatively
  - c. Describe anchoring devices for catheters and drains

- d. Differentiate tubes used to obtain, maintain, and protect respiratory function.
- e. Discuss patient safety issues with use of these devices
7. Evaluate methods and techniques of wound closure.
  - a. Examine factors that influence wound healing.
  - b. Analyze various tissue repair and replacement materials.
  - c. Compare and contrast biological and synthetic adhesives.
  - d. Demonstrate knowledge of biological wound cover materials
8. Compare and contrast suture materials, suture sizing, and suture coating.
  - a. Analyze the significance of suture characteristics on wound healing
  - b. Demonstrate proper selection, preparation, handling, and cutting of suture materials
  - c. Describe needle points and needle bodies
  - d. Demonstrate proper loading, handling and disposal of suture needles
9. Evaluate various applications of surgical stapling instruments.
  - a. Demonstrate proper assembly.
  - b. Analyze advantages and disadvantages of utilizing surgical staplers.
10. Evaluate the mechanisms of wound healing
  - a. Describe the inflammatory process as it relates to wound healing.
  - b. Compare and contrast intentional, unintentional, incidental and chronic wounds.
  - c. Classify surgical wounds
  - d. Analyze factors that influence wound healing
  - e. Discuss the role of the surgical technologists in the prevention of postoperative wound infections.
11. Evaluate the purpose of surgical dressings
  - a. Analyze the importance of postoperative wound care
  - b. Compare and contrast the most commonly used types of surgical and specialty dressings
  - c. Demonstrate the principles of sterile technique during the application of commonly used surgical and specialty dressings.
12. Examine minimally invasive surgical techniques
  - a. Describe methods of access
  - b. Describe methods of visualization

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## Big Ideas and Essential Questions

### Big Ideas

- Specimen care
- Wound healing
- Hemostasis
- Wound closure
- Wound protection
- Minimally invasive Surgery
- Surgical Robots

## Essential Questions

1. Why should a surgical technologist understand the principles of hemostasis?
2. What role does the surgical technologists play in the prevention of postoperative wound infection?
3. How can a surgical technologist help control costs in the operating room?
4. Why is specimen care so important to patient outcomes?
5. What role does equipment knowledge play in patient safety?

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These SLOs are not approved for experiential credit.

**Effective: Fall 2020**