BAKER COLLEGE
STUDENT LEARNING OUTCOMES

SUR 2050 Advanced Surgical Asepsis
2 Semester Hours

Student Learning Outcomes and Enabling Objectives

1. Evaluate technology use in surgery.
    a. Describe the basic components of a computer system.
    b. Evaluate basic electronic medical records systems used.
    c. Evaluate safe practices for implementing information technology.
    d. Describe the best practices in securing protected health information.
2. Examine electricity use in surgery.
    a. Define the terminology used to describe electrical components.
    b. Describe the principles of the flow of electricity.
    c. Describe the various components of the electrosurgical unit.
    d. Describe the safe use of electricity in surgery.
3. Analyze the use of lasers in the surgical setting.
    a. Describe the biophysics of lasers.
    b. Discuss the advantages of using lasers.
    c. Describe the types of lasers used in surgery.
    d. Describe the specific surgical application of each type of laser.
4. Evaluate diagnostic procedures and pathology used to obtain a diagnosis.
    a. Describe the purpose of diagnostic studies.
    b. Relate specific diagnostic procedures to surgical specialties.
    c. Describe the role of the surgical technologist during diagnostic surgical procedures.
    d. Describe imaging modalities.
    e. Discuss the purpose of interventional radiology.
5. Evaluate the principles of hemostasis.
    a. Discuss the role of the surgical technologist in hemostasis.
    b. Differentiate between the various methods of hemostasis.
    c. Discuss safety measures as they relate to various methods of hemostasis.
6. Evaluate suture use in the surgical setting
    a. Define the terminology related to sutures.
    b. Analyze the characteristics of suture material.
    c. Describe the characteristics of suture needles.
    d. Identify factors that are considered when choosing suture.
7. Evaluate the surgical technologist's role in wound management.
    a. Define the terminology related to wound healing.
    b. Describe the various types of wounds.
    c. Classify surgical wounds.

    d. Explore the factors that influence wound healing.
    e. Differentiate between types of catheters, drains, and tubes used in surgery.
    f. Describe the dressing materials use in wound covering.
8. Evaluate the role of the surgical technologist in minimally invasive surgical procedures
    a. Describe the components of minimally invasive surgery.
    b. Discuss the risks associated with minimally invasive surgery.
    c. Identify the advantages and disadvantages of minimally invasive surgery.
    d. Explain the role of robotics in minimally invasive surgery.
9. Evaluate the use of surgical supplies
    a. Identify supplies used during surgical cases.
    b. Relate the role of surgical counts to cost containment
    c. Describe the role of the surgical technologist in cost containment.
10. Investigate specimen collection techniques in the operating room.
    a. Describe specimen types
    b. Discuss specimen collection methods
    c. Describe the procedures for handling and transfer of specimens.
    d. List the required labeling components.
    e. Identify specimen collection containers.
11. Investigate skin preparation and draping techniques used in surgery
    a. Review standards of practice for surgical prep and draping
    b. Discuss the guidelines for patient hygiene and hair removal in surgical skin prep
    c. Demonstrate the different procedures for skin prep
    d. Discuss the rationale for surgical draping
    e. Apply the principles of asepsis to draping techniques
    f. Explain how to remove drapes at the end of a procedure

Big Ideas and Essential Questions

Big Ideas

- Technology use in surgery
- Principles of electricity in surgery
- Application of diagnostic procedures.
- Hemostasis
- Wound healing
- Methods of wound care and closure
- Application of wound dressings
- Uses for catheters, drains, and tubes
- Cost containment in the OR
- Minimally invasive surgical interventions
- Specimen collection and handling

Essential Questions

1. To what extent is a surgical technologist involved in hemostasis?
2. In what context can the surgical technologist influence wound healing?
3. How does patient diagnosis influence your practice?
4. How important are specimen collection and handling in the determination of patient

outcomes?

5. How does the surgical technologist use the principles of electricity to prepare for a surgical case?
6. How does the role of the surgical technologist change in a minimally invasive procedure in comparison to an open procedure?
7. How can the surgical technologist contribute to lowering costs in the operating room?

These SLOs are not approved for experiential credit.

Effective: Fall 2023