

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

SUBJECT AREA:	<u>Surgical Technology</u>			
COURSE RUBRIC AND NUMBER	<u>SRGT 1509</u>			
COURSE TITLE	<u>Fundamentals of Perioperative Concepts and Techniques</u>			
COURSE CREDIT HOURS	<u>5</u>	<u>3</u>	:	<u>6</u>
	Credits	Lec		Lab

### I. Catalog Description

In-depth coverage of perioperative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. A grade of “C” or better is required in this course to take the next course. **Prerequisites: BIOL 2401 and HPRS 1206. Corequisite: SRGT 1405. (3:6). Lab fee. Professional Practice Insurance required.**

### II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. Unit I-Operating Room Environment**
  1. Describe the physical layout of a typical surgical suite.
  2. Explain the rationale for traffic control patterns or zoning.
  3. Differentiate between direct and indirect support departments/services as they relate to the operating room.
  4. Identify basic furniture and equipment in an operating room.
  5. Demonstrate ability to operate/manipulate basic operating room furniture and equipment.
  6. Explain importance of good health and hygiene habits for operating room personnel.
  7. Describe appropriate operating room attire.
- B. Unit II-Principles of Aseptic and Sterile Techniques**
  1. Explain Standard Precautions as established by the CDC and enforced by OSHA and their application in the surgical environment.
  2. Discuss transmission-based precautions with known infections.
  3. Explain principles of sterile technique/aseptic technique.
  4. Explain the importance of “Surgical Conscience” in the surgical setting.
  5. Discuss the concept of barriers.
  6. Demonstrate correct techniques for opening of sterile items and delivery onto the sterile field.
  7. Apply principles of aseptic techniques to the surgical environment.
- C. Unit III-Scrubbing, Gowning, and Gloving**
  1. Explain the purpose of surgical hand scrub.
  2. Describe and demonstrate a surgical scrub procedure using:
    - a. Timed method
    - b. Counted stroke method
  3. Identify and demonstrate the aseptic principles when performing a surgical scrub.

4. Identify supplies needed for performing a surgical scrub.
5. Describe and demonstrate the methods of performing a brushless/waterless skin preparation.
6. Describe and demonstrate the aseptic principles of drying hands and arms after a surgical scrub, prior to gowning and gloving.
7. Discuss the characteristics of surgical gowns and gloves.
8. Identify the sterile and non-sterile areas of gowns and gloves when donned.
9. Describe and demonstrate principles of gowning and gloving to include:
  - a. Access to sterile gown/gloves
  - b. Prevention of contamination of gowns/gloves after donning.
  - c. Closed and open gloving techniques.
  - d. Replacement and/or removal of gowns/gloves using aseptic techniques

**D. Unit IV-Surgical Instrumentation**

1. Describe 9 classifications of instruments.
2. Recognize different types of instruments in each of the 9 classifications.
3. Relate the characteristics of instruments to their uses/surgical applications.
4. Identify the parts of a ringed instrument.
5. Implement/explain methods of cleaning instruments.
6. Explain ways of prolonging the life of surgical instruments.
7. Describe the variety of packaging materials and methods used for instrument trays and individual items.
8. List and identify the instruments in a typical laparotomy tray.
9. Explain the use and care of powered surgical instruments.

**E. Unit V-Hemostasis and Wound Closure**

1. Explain the mechanism of hemostasis.
2. Identify chemical methods used to achieve hemostasis during surgical intervention.
3. Identify mechanical methods used to achieve hemostasis during surgical intervention.
4. Identify thermal methods used to achieve hemostasis during surgical intervention.
5. Discuss specifications for suture material.
6. Distinguish among the two major classifications of suture materials.
7. Explain the process of suture selection.
8. Differentiate between natural and synthetic absorbable suture material.
9. Differentiate between natural and synthetic nonabsorbable suture material.
10. Describe criteria for needle selection.
11. Identify components of a surgical needle.
12. Relate classifications of surgical needles to the components identified in #7.
13. Describe common suturing techniques.
14. Explain suture/needle packaging and preparation.
15. Differentiate between types of surgical stapling devices.
16. Describe other materials that may be used for wound closure or repair.

**F. Unit VI-Wound Healing**

1. Distinguish between types of wounds.
2. List and describe the stages of wound healing.
3. Define the types of wound healing.
4. Correlate factors that affect wound healing with surgical intervention.
5. Interpret the classifications of surgical wounds.
6. Describe complications of wound healing.
7. Identify major types of drains, collecting mechanisms and their uses.
8. Identify dressings as to type, use, and preparation.

**G. Unit VII-Creation and Maintenance of the Sterile Field**

1. Distinguish between surgical technologist, circulator, and dual responsibilities during the pre-operative period.

2. Distinguish between surgical technologist, circulator, and dual responsibilities during the intra-operative period.
3. Distinguish between surgical technologist, circulator, and dual responsibilities during the post-operative period.

### **III. THECB Learning Outcomes (WECM)**

1. Demonstrate principles and practices of aseptic techniques.
2. Explain infectious processes and concepts of wound healing.
3. Create and maintain a sterile field utilizing basic case preparation and procedures.

### **IV. Evaluation**

#### **A. Preassessment**

The student must have completed all prerequisite courses and specialized programs requirements for admission into the program.

#### **B. Postassessment**

1. Written examinations will be administered at the completion of each unit-lecture/lab.
2. An individual skill assessment on scrubbing, gowning, and gloving will be administered upon completion of that unit-lecture lab.
3. A comprehensive individual skill assessment will be required at the end of the course.
4. A comprehensive written final examination will be administered at the end of the semester.
5. Unannounced quizzes may be administered at any time.

#### **C. Remediation**

The instructor will provide individual procedures for students needing remediation after an individual conference has been scheduled. Such procedures may include, but are not limited to supplementary assignments, tutorial assistance, etc.

#### **D. Grading Criteria**

1. All unit exams will be weighted equally and averaged to provide 40% of the semester grade.
2. Skill evaluation of scrubbing, gowning, and gloving will be weighted as one unit exam.
3. Comprehensive skill assessment will be weighted as 40% of the semester grade.
4. Comprehensive written final exam will be weighted as 15% of the semester grade.
5. Quizzes will be averaged and weighted as one unit exam to be averaged with all other exams.
6. Study Guide/Workbook assignments will be reviewed and weighted as 5% of the grade.

#### **E. Grading Scale**

A=93-100  
B=85-92  
C=77-84  
D=70-76

Grades are rounded.

F. SRGT 1509 must be completed with a "C" or above.

**V. Disability Statement (Americans with Disabilities Act {ADA})**

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

**VI. Six Drop Rule**

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because an exemption may apply. Refer to the EPCC catalog and website for additional information.

**VII. Title IX and Sex Discrimination**

Title 9 (20 U.S.C. 1681 & 34 C.F.R. Part 106) states the following "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance." The Violence Against Women Act (VAWA) prohibits stalking, date violence, sexual violence, and domestic violence for all students, employees and visitors (male and female). If you have any concerns related to discrimination, harassment, or assault (of any type) you can contact the Assistant to the Vice President for Student and Enrollment Services at 915-831-2655. Employees can call the Manager of Employee Relations at 915-831-6458. Reports of sexual assault/violence may also be reported to EPCC Police at 915-831-2200.