

## **SURG-110 FIRST LEVEL OF SURGICAL TECHNOLOGY**

6 CREDITS

### **SYLLABUS**

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#### **CATALOG DESCRIPTION**

Students will learn tasks and responsibilities of the Surgical Technologist. They will learn the practice of sterile technique. They will learn surgical scrub, gown and gloving, patient positioning, draping and surgical prep on patients. They will know the practice of standard precautions in the O.R. When they are finished with this class they will know how to set-up cases, open sterile supplies, perform counts, and pass instruments. They will do some practicum to compliment this course.

Prerequisites: Acceptance into the Surgical Technology Program. HITP 110, BIOL 224, BIOL 252, BIOL 253, ENGL111, ENG 211 or 218, COMM 110 OR 111, MATH 114 or higher, PSYC 120

Semester Offered: FALL Semester

#### ***COMMON STUDENT LEARNING OUTCOMES***

*Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...*

##### **BROAD AND SPECIALIZED LEARNING**

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

##### **CRITICAL THINKING**

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

##### **CULTURAL AND CIVIC ENGAGEMENT**

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

##### **EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

##### **INFORMATION LITERACY**

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

##### **INTEGRATING TECHNOLOGIES**

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

#### **COURSE LEARNING OUTCOMES**

*Upon successful completion of the course, the student will be able to:*

## SPECIFIC LEARNING OBJECTIVES

1. Demonstrate the principles of communication in the surgical setting.
2. Trace the historical development of surgical technology.
3. Recognize members of the surgical team and their roles.
4. Describe the surgical technology professional organizations: AST; ARC/STSA; NBSTSA.
5. Compare and contrast the various roles of the surgical technologist.
6. Analyze the components of effective teamwork and communication.
7. Discuss the meaning of “surgical conscience” and its application to surgical technology.
8. Summarize the different types of health care facilities.
9. Classify hospital departments and their relationship to surgical services.
10. Analyze the concepts of law.
11. Interpret the legal responsibilities of the surgical technologist and other surgical team members.
12. Compare and contrast criminal and civil liabilities and the consequences for these acts.
13. Analyze the American Hospital Association’s Patient Care Partnership.
14. Describe the need for professional liability insurance policies.
15. Analyze the key elements related to developing a surgical conscience.
16. Assess the resources that aid the surgical technologist in interpreting and following professional standards of conduct.
17. Analyze the role of morality during ethical decision making.
18. Analyze scope of practice issues as they relate to surgical technology.
19. Assess the patient’s response to illness and hospitalization.
20. Demonstrate awareness that all surgical patients have the right to the highest standards and practices in asepsis.
21. Distinguish and assess the physical, spiritual, and psychological needs of a patient.
22. Compare and contrast the patient’s responses to the process of death.
23. Discuss the procedure for a patient death in the operating room.
24. Compare and contrast the surgical care considerations for pediatric patients who are obese, diabetic, pregnant, immunocompromised, disabled, geriatric, or experiencing trauma.
25. Evaluate the unique physical and psychological needs of each special population.
26. Evaluate the role of the surgical technologist for the surgical care of each special population.
27. Recognize the hazards to the patient in the operative environment.
28. Distinguish among the support services that work with the operating room (OR) team in the care of the patient.
29. Review the type of air-handling system required in the OR and the temperature and humidity required to maintain sterile field.
30. Indicate cleaning procedures, traffic patterns, and routines required in the operative environment.
31. Recognize basic components of a computer system.
32. Demonstrate basic word processing internet, and e-mail functions.
33. Apply computer knowledge to safe patient care.
34. Apply electrical safety precautions.
35. Cite the basic principles of electricity and their application in the operating room (OR).
36. Interpret the basic concepts of robotics.
37. Analyze the geometrical concepts of robotics and the mechanism of the robotic system.
38. Apply the principles of robotics to safe patient care practices in the OR.
39. Demonstrate principles of sterile technique during robotic surgical procedures.
40. Discuss the relationship between the principles of asepsis and practice of sterile technique and surgical patient care.
41. Define and discuss the concepts of surgical conscience.
42. Discuss the principles of asepsis.
43. Define the terms related to asepsis.
44. Discuss the sterile practices related to the principles of asepsis.
45. Identify the principles and procedures related to disinfection and sterilization.

A copy of this approved syllabus is on file in the dean’s office.

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46. Demonstrate competency related to the practice of sterile technique.
47. Demonstrate competency in the procedures related to disinfection and sterilization.
48. Discuss the surgical environment and the application of principles of asepsis to the environment.
49. Compare and contrast methods of hemostasis and blood replacement and demonstrate the preparation and use of appropriate agents or devices.
50. Recognize developing emergency situations, initiate appropriate action, and assist in the treatment of the patient.
51. Apply knowledge of radiological and chemical injuries and biological warfare to the treatment of the patient.
52. Discuss nature-, human-, and nature/human-caused-types of disasters.
53. Explain the various components of personal, health care facility, and national disaster planning.
54. Describe the initial response and steps taken when an all-hazards event occurs.
55. Discuss the various roles the surgical technologist can fulfill during an all-hazards event.
56. Assess the action, uses, and modes of administration of drugs and anesthetic agents used in the care of the surgical patient.
57. Convert equivalents from one system to another and accurately identify, mix, and measure drugs for patient use.
58. Recognize general terminology and abbreviations associated with pharmacology and anesthesia.
59. Demonstrate safe practice in transferring drugs and solutions from nonsterile area to the sterile field.
60. Demonstrate the procedure for identifying a drug or solution on the sterile field.
61. Recognize the side effects and contraindications for the use of various drugs and anesthetic drugs.
62. Interpret the factors that influence anesthesia selection for individual patients.
63. List the equipment used during anesthesia administration.
64. Demonstrate the precautions when identifying drugs and solutions in the operating room.
65. Interpret the principles and demonstrate the measurement and recording of vital signs.
66. Analyze how sterile technique is used in relation to anesthesia procedures.
67. Compare and contrast the roles of the surgical technologist and circulator during the administration of anesthesia.
68. Explain the relationships between instrumentation, equipment, and supplies and with quality patient care in the operating room (OR)
69. Explain the relationship between instruments, equipment, and supplies and the OR environment with safety concepts.
70. Indicate items that require sterilization prior to use in the sterile field.
71. Recognize basic instruments by type, function, and name.
72. Demonstrate proper care, handling, and assembly of instruments.
73. Differentiate the types of special equipment utilized in OR practice and demonstrate proper care, handling techniques, and safety precautions.
74. Cite the names and functions of accessory equipment and demonstrate proper care, handling, and assembly.
75. Collect and prepare supplies used in the OR
76. Indicate terms relevant to wound healing.
77. Summarize the possible complications of wound healing.
78. Recognize the classifications of wound healing.
79. Indicate and give examples of types of traumatic wounds.
80. Analyze the factors that influence healing and recognize the manner in which they affect the healing process.
81. Recognize the characteristics of inflammation.
82. Cite and interpret common suture terms.
83. Classify and differentiate suture materials and stapling devices and their usage.
84. Recognize the types, characteristics, and uses of natural and synthetic absorbable suture materials.
85. Compare and recognize the common natural and synthetic nonabsorbable sutures, stating their sources, common trade names, and uses.
86. Demonstrate application of recommended preparation and handling techniques for suturing and stapling devices and provide rationale for choice.
87. Cite and interpret common suture techniques.
88. Summarize the basic uses and advantages of stapling instruments

## COURSE REQUIREMENTS

1. Have required textbooks and workbooks, packets, lab supplies listed under required textbooks.
2. Complete and submit written assignments by announced due dates.
3. Take all examinations and quizzes on the dates administered. Make up exams will be given only under certain circumstances with a reduction in the grade by 10%.
4. Practice procedures and perform demonstrations satisfactorily.
5. Participate in class and lab discussions and activities.
6. Maintain proper appearance and professional dress during lab and practicum.
7. Maintain professional behavior
8. Meet specific objectives for each laboratory experience consistently.
9. Follow safety procedures and guidelines.
10. Read and verify understanding of San Juan College, Surgical Technology Student Handbook.