

South Central Career Center SURGICAL TECHNOLOGY PROGRAM

Course Syllabus

COURSE TITLE: Surgical Technology Principles & Practices Introduction

SEMESTER: Spring 2022

COURSE NUMBER: Sur 7050.01

INSTRUCTORS: Misty Hathcock CST/CFA

OFFICE: TH212

PHONE: 417 256-6152 ext. 4654

OFFICE HOURS: Monday 12:00 p.m. to 5:00 p.m. by appointment

CONTACT HOURS: 270

COURSE MATERIALS:

Surgical Technology Principles and Practice, Elsevier, 7e, 2020 Pocket Guide to the Operating Room, Goldman, 2020 Surgical Instrumentation. Nemitz 3e

COURSE RATIONALE:

This course will educate the students about the operating room environment. This course will instruct the student in different methods of disinfection and sterilization and terminal cleaning of the OR. Students will learn how to employ the principals involved in donning surgical attire. Students will be instructed on the identification and use of supplies and equipment needed for surgical procedures. This course will discuss patient care concepts including the biopsychosocial needs of the patient and death and dying. Students will be able to compare and contrast the different technological sciences used in the operating room setting. Students will be taught introduction to disease and tumor classification. Students will be taught about specimen and wound care including inflammation and infection processes, different skin preparations, and

wound closure. The student will also be instructed in different urinary catheterizations and drains. The student will be instructed in perioperative case management, transportation and positing methods of the patients. The student will be taught the assistant circulator role duties. The students will be instructed in different legal guidelines with the OR. Students will be taught professionalism within the healthcare field. The student will be taught fluid and hemodynamic disorders and surgically treatable diseases and disorders.

CATALOG DESCRIPTION:

This course is designed to teach the student how to identify the operative sequence for setting up the surgical suite. This course is used to instruct the student to identify different equipment and instruments used in the operative field. This course is used to instruct sterile technique and surgical scrub. This course is to instruct the learner in surgical counts and draping techniques. This course instructs the learner in different abdominal incisions, and hemostatic agents and wound exposure. This course will teach the student how to differentiate different surgical dressings. This course will instruct the student in different PACU regulations. This course will educate the student on patient care concepts. This course will provide the student with knowledge on various subjects of professionalism with the healthcare field.

COURSE OBJECTIVES:

When students successfully complete this course, they will be able to:

- 1. Demonstrate job-related health, safety and fire-prevention.
- 2. Recognize appropriate surgical attire
- 3. Employ principles involved in donning surgical attire
- 4. Describe and perform the physical preparation and care that the surgical patient may receive prior to the surgical procedure
- 5. Evaluate the items on the pre-operative patient checklist
- 6. State the purpose of proper identification
- 7. Demonstrate the identification process for a surgical patient admitted to the surgical suite
- 8. Identify methods of patient transportation
- 9. Demonstrate the principles of safe transportation
- 10. Review the patient chart for completeness
- 11. Analyze the procedure for obtaining informed surgical consent
- 12. Analyze the legal concepts of obtaining informed surgical consent
- 13. Identify equipment utilized for safe transfer of the surgical patient
- 14. Employ the principles of body mechanics when transferring the surgical patient
- 15. Analyze the use, components, and aides utilized to achieve various surgical positions
- 16. Detail the sections and functions of the OR table
- 17. Perform basic positioning
- 18. List the indications for urinary cauterization
- 19. Discuss the basic considerations for urinary catheterization
- 20. List the supplies required to perform urinary catheterization

- 21. Demonstrate urinary catheterization
- 22. Discuss the principles of monitoring urine output
- 23. Compare and contrast different types of skin preparations
- 24. Compare and contrast different chemical agents used for skin prep
- 25. Describe the steps and rationales for surgical skin prep
- 26. Describe the application of surgical equipment
- 27. Identify the classifications, names, parts, materials, finishes and uses of basic surgical instrumentation
- 28. Explain the relationship between instrument type and usage
- 29. Apply knowledge of basic surgical instrumentation to specific surgical procedures
- 30. Apply terms related to asepsis
- 31. Discuss sources of contamination
- 32. Demonstrate sterile technique
- 33. Demonstrate the steps of a hand wash
- 34. Demonstrate the steps of the surgical scrub
- 35. Employ sterile technique during the surgical scrub
- 36. Employ sterile technique when gowning and gloving self and when assisting other team members
- 37. Discuss the purpose and legal responsibilities of counts
- 38. Describe the techniques used to prevent foreign body retention
- 39. Discuss when counts should be preformed
- 40. Describe the methods for counting
- 41. Demonstrate the procedure for counting instruments, sponges, sharps and other items on the field
- 42. Describe various types of draping material used in surgical procedures
- 43. Select the appropriate drapes for specific positions and surgical procedures
- 44. Demonstrate the aseptic principles of draping the patient, equipment and furniture
- 45. Discuss methods of obtaining specimens
- 46. Discuss the types of specimen containers
- 47. Describe procedure for validating specimen with surgeon and circulator
- 48. Describe the procedure for specimen labeling and transfer to appropriate department
- 49. Discuss areas for specimen storage
- 50. Demonstrate the handling and preservation for specific types of specimens
- 51. Identify the various tissue layers of the abdominal wall
- 52. Describe the creation and usage of various surgical incisions
- 53. Discuss the advantages and disadvantages of incision types
- 54. Differentiate among various methods of hemostasis
- 55. Demonstrate surgical technologists' role in hemostasis
- 56. Describe principles of exposure
- 57. Apply techniques for tissue exposure
- 58. Compare and contrast the types and characteristics of various catheters and drainage devices
- 59. Correlate the correct drainage device for each drain
- 60. Compare and contrast the conceptual differences between gravity and vacuum drainage
- 61. Prepare catheters and drains for intraoperative use.
- 62. Prepare anchoring devices for drains

- 63. Analyze and assess the factors that influence the closure of each wound layer
- 64. Compare and contrast suture materials, suture sizing, and suture coatings and analyze their significance
- 65. Demonstrate proper suture selection, preparation, handling, and cutting techniques
- 66. Diagram and describe needle points, needle bodies and demonstrate the proper placement, handling, loading, and disposable of surgical needles
- 67. Compare and contrast reusable and disposable surgical stapling instruments and analyze the advantages and disadvantages of utilizing surgical staplers
- 68. Compare and contrast biological adhesives and synthetic adhesives
- 69. Analyze and evaluate various tissue repair and replacement materials
- 70. Describe the advantages and disadvantages of the repair and replacement materials
- 71. Discuss the specific applications of synthetic mesh
- 72. Compare and contrast the most commonly used types of surgical and specialty dressings
- 73. Describe the importance of proper surgical dressing application techniques
- 74. Apply proper principles of sterile technique and demonstrate the application of commonly used types of surgical and specialty dressings
- 75. Compare and contrast intentional, unintentional, and incidental/chronic wounds
- 76. Analyze the healing process and inflammatory process
- 77. Evaluate the classification of surgical wounds and evaluate the prevention of postoperative wound infections
- 78. Demonstrate basic wound care concepts and apply the principles of asepsis to the practice of sterile technique
- 79. Describe the emergency procedures carried out in the OR setting
- 80. Obtain CPR certification
- 81. Describe potential postoperative discomforts and complications
- 82. List necessary equipment in the PACU
- 83. Identify the methods of processing items during terminal disinfection and sterilization
- 84. Compare and contrast the materials used for creating microbial barriers
- 85. List the process for preparing items for sterilization
- 86. Identify process monitoring devices and methods
- 87. Identify systems used for sterile storage
- 88. Apply principles of sterile storage to handling of sterile supplies
- 89. Demonstrate awareness of improper handling and use of sterile supplies
- 90. Perform decontamination of the OR environment
- 91. Analyze the factors and variables of disinfecting agents
- 92. Compare and contrast disinfecting agents
- 93. Identify the biopsychosocial needs of the patient
- 94. Describe Death and Dying
- 95. Identify the different electrical sources in the operating room
- 96. Demonstrate how to use information technology
- 97. Discuss the use of Robotics in the perioperative setting
- 98. Discuss professional management, ethical and moral issues, legal issues, documentation and risk management, professionalism information, healthcare facility organization and management, physical environment, and All-Hazards preparation
- 99. Demonstrate employability skills, communication skills and teamwork, and

professionalism within a healthcare facility

Labs:

Lab exercises cannot be made up outside of their regularly scheduled time. Absences from more than three (3) labs could result in an "F" for the course. Student will be tested on Phase I lab skills (Open Surgical procedures); Phase II lab skills (Laparoscopic surgical procedures); and Phase III lab skills (LAVH surgical procedures). Students must pass each phase with an 85% to progress in lab skills. The student could be given up to two retakes on each phase before possible dismissal. Students must make an 85% or better on lab finals and instrument final to continue to clinical rotations.

GRADING SCALE:

Grades are based on using assessment tools such as exams, assignments, and final exams at the end of each quarter. Each exam question is worth one point unless noted otherwise. The number of points earned divided by the number of points possible will determine the student's grade. Graded materials will be returned in a timely manner. Grade percentages are as follows:

Α	90-100	4
В	80-89	3
С	70-79	2

*Students must maintain a grade of 'C' or better in the non-Core courses to remain in the program. Students must also complete lab skills final and instrument final with an 85% or better to continue onto the clinical rotations. Clinical components of Surgical Technology program are graded on a Pass/Fail basis and must be passed in order to continue in the program. *60 cases need to be verified by the end of Clinical Practicum I, as well as all clinical time made up. If this benchmark is not met it will result in disciplinary actions.

PROFESSIONAL CONDUCT

All participants in this program are expected to conduct themselves appropriately. People are to be treated with respect and dignity at all times. Rude remarks, humor at the expense of others, or any form of mean spiritedness, are inappropriate regardless of intent. When choosing behavior, consider what would be acceptable in the work environment to which one aspires. For example, talking while others have the floor is not any more appropriate here than it would be in a staff meeting conducted by a supervisor. One of the anticipated learning outcomes of this program is to know what it is to conduct oneself properly. Students pay for the opportunity to learn. This opportunity should not be diminished by others. The instructor is responsible for maintaining the appropriate behavior in the class. Individuals who do not comply with behavioral expectations risk being required to withdraw from the class. Questions regarding the behavioral expectations for this program should be addressed with the Program Coordinator. See Surgical Technology Program Student Handbook for additional information.

MAKE UP POLICY

Whether or not the instructor is contacted, students who miss class are responsible for

checking with another student in regard to material covered or assignments made. If a video was shown during the missed period, the student should contact the Program Coordinator to check out the video for viewing either at home or in the classroom after class. A one-page report on the video may be required to be turned in within three days of the student's return to class.

Any assignment or exam missed—regardless of reason—will result in zero points for that assignment or exam unless the instructor is notified *in advance* of absence and arrangements are made for completing work due. It is the student's responsibility to plan with the instructor *before class* on the day the student returns to school. If the makeup assignment or exam is not completed as initially arranged, zero points will be recorded with no further opportunity for completion.

If tardy, it is up to the instructor whether the student will be allowed to turn in an assignment or take an exam with the class. There will be a 10% reduction in grade if the student arrives after the exam has started, or for any exam taken or assignment turned in after the scheduled time. A student will be allowed to make up only one exam per course.

Due to the nature of presentations, daily assignments, or quizzes, grade will be recorded as zero without opportunity to make up points if student is absent. If the assignment or quiz is mandatory, it must still be completed but no points will be recorded.

CLASSROOM ATTENDANCE

All students are expected to be present for their scheduled classes and labs. Regular attendance and participation are required. Absences will be considered justified and excusable only in cases of emergencies, serious illness or death in the immediate family.

The instructor has the responsibility to determine specific attendance policies for each course taught, including the role that attendance plays in calculation of final grades and the extent to which work missed due to non-attendance can be made up.

Students are expected to be in class on time each class period, and show respect to the presenter whether faculty, student, or guest speaker. All material covered, regardless of presenter or presentation method, may be included on exams. Assignments made must be completed by each student and are due at the beginning of class unless stated otherwise. A white eraser is needed by each student to correct answers on exams.

Attendance and punctuality are strong considerations for employment; therefore, absences, late arrivals, or early departures are discouraged for any reason except emergencies. Instructors reserve the right to require that late students enter the classroom only on breaks, especially if an exam is in progress. Students exhibiting behavior which may be considered disruptive to a positive learning environment may be dismissed from the classroom and counted absent for the day.

Any student with symptoms of a communicable illness should not be in attendance due to the potential for passing their illness to other students and faculty. The instructor may require a student to see a physician and return with permission stating it is safe for the student to be in

an academic setting.

REGULATIONS REGARDING ATTIRE

- Students are expected to wear clean clothing and dress in a conservative manner with no cleavage or mid-rifts showing when on campus and when coming and going from the hospitals. Halter and midriff tops are not permitted, nor are any clothing items which display unprofessional language or pictures. Undergarments must be worn, but must not be visible. Scrub tops are available for students to wear in lab. Students will change into scrub tops and pants on arrival in the operating room for clinicals.
- Oral hygiene, daily bathing and use of an effective deodorant are required. Personal hygiene should always be above reproach. Passion marks or hickeys must not be visible.
- 3. Cosmetics should be used in moderation. No strong or offensive odors of any kind are allowed in the classroom, lab, or at the clinical sites. This includes but is not limited to perfume, cologne, lotion, and/or tobacco smoke. Students are not permitted to leave the operating room to smoke or use tobacco products.
- 4. Body art and tattoos must be covered for lab and clinicals. Coverings are removed only to scrub hands for practice and clinical experience. Students are discouraged from obtaining tattoos while in the program due to risk of infection.
- 5. Fingernails must be clean, neatly trimmed, and reasonable in length, i.e. not exceed the length of the finger pad or seen from the palm of your hand. Fingernail polish or acrylic nails may not be worn.
- 6. Students are to **remove all jewelry** while in lab and clinicals. No facial piercing or oral jewelry is permitted in the classroom, lab or clinical areas. The only jewelry permitted to be worn to the operating room is a wristwatch and wedding rings; however, **all jewelry must be removed prior to scrubbing.**
- 7. Hair, beards, and mustaches must be neat, clean, well trimmed, and covered. Long hair must be secured while in lab and clinical areas.
- 8. Shoes are purchased by the student and must be clean, sturdy, rubber-soled, and fluid-proof (non-perforated). Shoes should be comfortable as surgical technologists stand for long periods of time, and should be secure so as not to come off if required to hurry to an operating room with emergency equipment.
- 9. Any deviation from the above regulations is considered inappropriate. Students failing to comply with regulations will be sent home and an absence will be recorded for the day without opportunity to make up the missed time.
- 10. Disciplinary action will be taken if a student fails to comply with any regulation regarding attire.

COURSE REPEAT POLICY

A student enrolled in the Surgical Technology program must complete each required course with a 'B' or above. The student will need to reapply to be considered and be reevaluated before they can reenter the program.

ACADEMIC AND COURSE GRADE APPEAL

South Central Career Center has established an equitable and orderly process to resolve academic dissatisfaction at the School. This may include final grades, instructional procedures, attendance, instructional quality and situations related to academic issues.

For more information concerning the Academic and Course Grade Appeal procedure, please refer to the Student Handbook.

Complaint, Grievance and Appeal Procedures

A method is provided for handling any school problems or difficulty, which might occur during the school year. If a grievance arises, the following procedures are to be followed. The grievance must be stated in written form. *See the South Central Career Center Adult Handbook.

ETHICAL GUIDELINES

Any behavior that tends to gain an unfair advantage for any student in an academic matter may result in dismissal from the program. This includes, but is not necessarily limited to:

- No student will wear head gear, hats or caps that would shield their eyes, occlude vision, or cover their face during exams; face is to remain uncovered during tests.
- No student shall, during an examination have, use, or solicit any unauthorized information or material—written or oral, copy from another student's paper, or discuss the examination with any other person.
- No student shall, during an examination, knowingly give any unauthorized aid to another student, including sharing of information via cell phone or text messaging.
- No student shall acquire, by any means, knowledge of the contents of an examination yet to be given.
- No student shall fraudulently claim for credit any classroom, laboratory, clinical, or other assignment performed by an unauthorized person, including a fellow student.
- No student will discuss a patient's record with anyone except the patient, surgeon, or instructors. All patient information MUST be kept confidential per HIPAA regulations.

ACADEMIC DISHONESTY

Academic integrity represents one of the most essential elements of the teaching and learning process. All members of the SCCC community are expected to fulfill their academic obligations through honest and independent effort. By submitting coursework to your instructor as an SCCC student, you pledge that the work is truly your own.

Violations of academic integrity—which include but are not limited to cheating, collusion, plagiarism, and other forms of academic misconduct—damage your personal character and thwart your instructors' ability to promote your learning. As an SCCC student, you are responsible for knowing and following the School's policies and procedures regarding academic integrity. These guidelines and more information related to academic integrity are available in the Student Handbook.

The School recognizes that academic integrity is complex and can be confusing. Therefore, you are obligated to review these information sources carefully and to seek needed clarification from your instructor concerning questions of collaborative work, citation of sources, or other issues related to academic integrity.

DROPPING A CLASS

It is your responsibility to understand the School's procedure for dropping a class. If you stop attending this class but do not follow proper procedure for dropping the class, you will receive a failing grade. To drop a class, complete the necessary form in Student Services.

Failure to properly withdraw from classes can have a detrimental effect on your grade point average and your future educational goals.

ADMINISTRATIVE WITHDRAWAL FROM A COURSE

It is the policy of the school that a student will be administratively withdrawn from a course due to lack of attendance in seated classes or nonparticipation in classes.

The number of absences that will result in administrative withdrawal from this class is six (6) days or one (1) consecutive calendar week.

Students should be aware that administrative withdrawal for lack of attendance or nonparticipation may reduce the amount of financial aid they receive, delay their graduation or necessitate repayment of aid already received and does not relieve their obligation to pay all tuition and fees due to the School.

DISCIPLINARY ACTION

The Surgical Technology Student Handbook serves as your source of information in regard to expectations of behavior and performance as a student in the program. It is our responsibility to prepare students for employment in healthcare; following policies is part of that preparation. When a student does not comply with expectations, it can affect the learning environment for all and could place the surgical patient in jeopardy. As with an employer, a student should petition for change by going through appropriate channels. Each student is responsible for knowing, accepting, and meeting expectations.

Should a student fail to comply with any expectation, regulation, or policy, it may be viewed as an indication that the student is not interested in successful completion of the program. Therefore, the student may receive a verbal warning, written warning, and/or be placed on probation. Certain behaviors and/or any further infractions will necessitate additional disciplinary action, up to and including dismissal from the program.

Any compromise of patient safety or behavior in violation of the rights of any member of the South-Central Career Center community could result in dismissal. Incidents related to the

dismissal of Allied Health students typically follow a pattern of noncompliance with competencies including, but not limited to, the critical elements identified in clinical evaluations. Exceptions to this include, but are not limited to, direct injury or abuse to patients, faculty, peers, and others which will result in **immediate dismissal** from the program. Other violations which will result in dismissal include theft of property, physical or psychological abuse of others, purposeful damage to another's property, threats made against another, disruption of authorized activities being conducted by surgical technology faculty, illegal use of drugs or alcohol, or disclosure of patient information other than to appropriate personnel.

Please note that a clinical facility may immediately remove from their premises any student who poses an immediate threat or danger to personnel or to the quality of patient care, or for unprofessional behavior. They may request that SCCC withdraw or dismiss a student from their clinical experience if the student's clinical performance is unsatisfactory or if their behavior is disruptive or detrimental to the facility or its patients. In such an event, the student's participation in the clinical component will be **terminated immediately** and the student will either need to withdraw or be dismissed from the program.

NON-DISCRIMINATION STATEMENT

South Central Career Center prohibits discrimination and harassment and provides equal opportunities in its admissions, educational programs, activities and employment, regardless of race, color, religion, gender, national origin, age, marital status, sexual orientation, political affiliation, veteran status and disabilities that include HIV and AIDS and medical conditions. Bona fide occupational qualifications will be allowed in those instances where age, gender or physical requirements apply to the appropriate and efficient administration of the position.

PERSONAL CALLS

Cell phone use in the classroom, lab, and at clinical sites is not allowed. This includes making calls, receiving calls, text messaging, photos, and the internet. Keep cell phones and pagers turned off or in silent mode during class. Emergency calls received may be taken in the hallway outside the classroom. Interruptions due to personal calls or pages during class can lead to disciplinary action. Phones in the lab and in the clinical areas are not to be used for personal calls. Give family members the contact number for clinical sites rather than taking cell phones into the operating room. Public phones are available at each facility for student use.

COMPUTER USE EXPECTATIONS FOR SEATED COURSES

In today's computer-based society, it is imperative that students develop computer-based skills. Therefore, South Central Career Center's students will be expected to use technology to assist them in the learning process. At a minimum, students will be expected to log on to the online learning platform where the course syllabus and faculty information are located.

In a "seated" course, the time spent in class should be the primary venue used to deliver the

content of the course as stated in the course abstract. The manner in which that content is delivered in the classroom is left to the discretion of the instructor.

In a "seated" course, the administering of course assessments (other than "traditional" assessments including, but not limited to, research papers, essays, mathematical problem sets, etc.) should be conducted primarily during the regularly-scheduled class periods. The manner in which those assessments are administered is left to the discretion of the instructor. The use of assessments (administered online) outside the regularly-scheduled class periods are acceptable provided the following criteria are met:

- the number of assessments is conducted on a limited basis:
- the percentage of the course grade comprised by the online assessments is kept to a minimum.

AMERICANS WITH DISABILITIES ACT (ADA)

Any student should notify this instructor immediately if special assistance or devices are needed to accommodate a disability. This School complies with Section 504 of the Rehabilitation Act of 1973 and makes every effort to ensure disabled persons admitted to the School as students or employed by the School are afforded all the rights and privileges provided to them by State and Federal law.

To request academic accommodations for a disability, contact Disability Support Services at 417.447.8189 or in ICE 127. Students are required to provide documentation of disability to Disability Support Services prior to receiving accommodations.

DISABILITY SUPPORT SERVICES

Disability Support Services has been designated by the school as the primary office to guide, counsel and assist students with disabilities. If you receive services through the Disability Support Services Office and require accommodations for this class, make an appointment with your instructor as soon as possible to discuss your approved accommodation needs. Bring your Adult Student Request for Accommodations form to Office to the appointment. Your instructor will hold any information you share in strictest confidence.

ASSOCIATION OF SURGICAL TECHNOLOGISTS CODE OF ETHICS

- I. To maintain the highest standards of professional conduct and patient care.
- II. To hold in confidence, with respect to patient's beliefs, all personal matters.
- III. To respect and protect the patient's legal and moral right to quality patient care.
- IV. To not knowingly cause injury or any injustice to those entrusted to our care.
- V. To work with fellow technologists and other professional health groups to promote harmony and unity for better patient care.
- VI. To always follow the principles of asepsis.
- VII. To maintain a high degree of efficiency through continuing education.
- VIII. To maintain and practice surgical technology willingly, with pride and dignity.

- IX. To report any unethical conduct or practice to the proper authority.
- X. To adhere to the Code of Ethics at all times in relationship to all members of the health care team.

Hear and you forget; see and you remember; do and you understand." Rudolph Steiner