



TECHNICAL COLLEGE
OF THE LOWCOUNTRY

Technical College of the Lowcountry
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AHS 130
Surgical Environment for Healthcare Professionals
Summer 2020

Course Description

AHS 130 Surgical Environment For Healthcare Professionals

Lec. 3 Lab. 0 Cr. 3

This course offers a comprehensive introduction to the surgical team, basic instruction in the protocols operating room and aseptic techniques.

Prerequisite: SUR 104, SUR 110

Co-requisite: SUR 112, SUR 106, SUR 126

Text and References

1. Surgical Technology Principles and Practice, 7th Edition, Elsevier/Saunders.

Course Goals: (*designates a CRUCIAL goal)

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

1. Describe the principles of operating room design
2. Describe the purpose of traffic patterns in the operating room
3. Identify common items found in the surgical suite*
4. Explain temperature and humidity ranges used in the surgical suite and why they are important*
5. Discuss the function of various work areas in the surgical suite*
6. List common hospital ancillary services and describe their functions
7. Define *health care insurance* and discuss the ways patients pay for care
8. Define *chain of command*
9. Identify perioperative professionals and their roles*
10. Describe the proper procedure for taking the patient's vital signs

11. Accurately document vital sign measurements
12. Describe the use of an electrocardiograph*
13. List and define commonly used imaging studies
14. Discuss basic blood and urine chemistry tests
15. Describe different methods of tissue biopsy
16. Describe the effects of malignancy on the body
17. Discuss cancer screening
18. Identify the risks that are present in the operating room *
19. Explain the importance of the fire triangle
20. Discuss the fuels and source of ignition commonly found in the operating room*
21. Describe how to respond appropriately to a patient fire*
22. Identify methods associated with preventing fires in the operating room*
23. Describe measures to safely store, transport, and use compressed gas cylinders
24. Describe methods to avoid chemical injury
25. Describe toxic substance in smoke plume*
26. Describe Standard Precautions*
27. Discuss techniques to prevent sharps injuries*
28. Identify the practice for transmission-based precautions
29. Identify methods of properly handling and disposing of hazardous waste in the operating room*
30. Describe the symptoms of true latex allergy
31. Identify necessary precautions to prevent latex reaction in allergic patients
32. Describe correct body mechanics for lifting, pulling, and pushing heavy equipment*
33. Explain different classifications of organisms and the binomial system
34. Describe components of the cell and cell transport
35. Discuss methods of identifying microbes
36. Identify the basic components of a biological microscope and describe their functions
37. Relate the study of microbiology and the process of infection to surgical practice
38. Describe blood-borne pathogen*
39. Describe the phases of types of infections*
40. List and describe types of bacteria and the diseases they cause*
41. Explain the significance of multi-drug resistant organisms*
42. List and describe types of viruses and the diseases they cause*
43. List and describe types fungi and the diseases they cause*
44. List and describe types of protozoa and the diseases they cause*
45. Describe the body's defense mechanisms against infection*
46. List the ways a person acquires immunity to pathogenic organisms*
47. Relate a good surgical outcome to the patient's immune response*
48. Review the guidelines and recommendations related to aseptic techniques*
49. Clearly define terms related to aseptic technique and the principles of asepsis*
50. Explain the concepts of barriers and containment
51. Explain surgical conscience*
52. Demonstrate the principles of aseptic technique*
53. Explain the relationship between personal hygiene and asepsis
54. Describe and explain the importance of surgical attire
55. Practice hand washing, hand disinfection, and the surgical scrub using the correct methods*
56. Demonstrate how to open sterile packs*

57. Define and give examples of evidence-based practice
58. Correctly use terms related to disinfection and sterilization
59. Explain the Spaulding system of classification
60. Describe the steps of reprocessing surgical instruments from the point of use to sterilization*
61. Discuss the principles and processes of decontamination*
62. Explain the rationale for specific methods of wrapping of instruments and loading of the steam sterilizer
63. Explain the principles of gas sterilization*
64. Describe special processing required for instruments exposed to Creutzfeldt-Jakob disease
65. Distinguish between disinfection and sterilization*
66. Recognize the hazards associated with the use of chemical disinfectants
67. Describe terminal cleaning of the operating room environment

Student Contributions

Classes are designed to employ a variety of teaching techniques. In order to maximize learning, required readings and Web enhanced sections should be done prior to class. If a student is falling behind in clinical performance and/or academic achievement, it is imperative to seek immediate assistance from the instructor.

Course Evaluation

Discussion Boards (4-6)	10%
Exams (4-6)	50%
Quizzes (4-6)	20%
Final Exam	<u>20%</u>
	100%

Course Schedule

Online

ADA Statement

The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

Attendance

1. The College's statement of policy indicates that students must attend ninety percent (90%) of total class hours or they will be in violation of the attendance policy.
2. Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.
3. Students taking an online/internet class must sign in **and** communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING. **Also, for any online course, or component of a course, students are required to log into the course (at least once per week) and complete the required assignments to meet attendance requirements.**
4. Reinstatement requires the signature of the Division Dean.
 - a. In the event it becomes necessary for a student to withdraw from the course **OR if a student stops attending class, it is the student's responsibility to initiate and complete the necessary paperwork.** Withdrawing from class may have consequences associated with financial aid and time to completion. Students are strongly encouraged to consult with Financial Aid prior to withdrawing from any class, particularly if the student is currently on a warning or probation status.
 - b. When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor **MUST** withdrawal the student with a grade of "W", "WP", or "WF" depending on the date the student exceeded the allowed absences and the student's progress up to the last date of attendance

Or
 - c. Under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded.
 - d. Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.
5. A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.
6. Students are **never** to send a message with another student in the event of an absence.
7. Any pregnancy must be declared in writing to the program director. See Surgical Technology student handbook for additional information regarding pregnancy.

8. Students are expected to be in class *on time*. Arrival to class after the scheduled start time or leaving class prior to dismissal counts as a tardy. Three tardies and/or early departures are considered as one absence unless stated otherwise.
9. It is the student's responsibility to sign the roll/verify attendance with instructor upon entering the classroom. Failure to sign the roll/verify attendance results in a recorded absence. In the event of tardiness, it is the student's responsibility to ensure that attendance is marked. **The student is responsible** for all material/announcements presented, whether present or absent.
10. Continuity of classroom and laboratory (which includes clinical experiences) is essential to the student's progress in providing safe and competent patient care. Students are expected to use appropriate judgment for participating in clinical activities.
To evaluate the student's knowledge and skills, it is necessary for the student to be present for all clinical experiences.
If an absence does occur, the designated clinical site and the Surgical Technology instructor must be notified by telephone no later than 30 minutes prior to the start of the clinical experience. If the ST instructor cannot be reached you are to call the HS Division and leave a message.
The Division of Health Sciences telephone number is 843-525-8267.

A copy of TCL's STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

Hazardous Weather

In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLVA 101.1, WSOK 1230 AM, WAEV 97.3, WTOC TV, WTGS TV, WJWJ TV, and WSAV TV. Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. <https://tcl.regroup.com/signup>

Academic Misconduct

There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship.

It is the student's responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the *TCL Student Handbook*, the Division Office, and the Learning Resources Center.

Health care professionals hold the public trust. Academic misconduct by health science students, calls that trust into question and academic integrity is expected.

It is a fundamental requirement that any work presented by students will be their own.

Examples of academic misconduct include (but are not limited to):

1. Copying the work of another student or allowing another student to copy working papers, printed output, electronic files, quizzes, tests, or assignments.
2. Completing the work of another student or allowing another student to complete or contribute to working papers, printed output, electronic files, quizzes, tests, or assignments.
3. Viewing another student's computer screen during a quiz or examination.
4. Talking or communicating with another student during a test.
5. Violating procedures prescribed by the instructor to protect the integrity of a quiz, test, or assignment.
6. Plagiarism in any form, including, but not limited to: copying/pasting from a website, textbook, previously submitted student work, or any instructor-prepared class material; obvious violation of any copyright-protected materials.
7. Knowingly aiding a person involved in academic misconduct.
8. Providing false information to staff and/or faculty.
9. Entering an office unaccompanied by faculty or staff.
10. Misuse of electronic devices.

Grading Scale

Grading scale	
90% - 100% A	W withdraw
82% - 89% B	WP withdraw with passing grade
75% - 81% C	WF withdraw with failing grade
70% - 74% D	I Incomplete
Below 70% F	

Grading Methodology.

The final grade must be 75.00 or more in order to pass the course and progress in the program. Students absent from an examination or presentation will receive a "0" grade for the examination unless other arrangements are made with the individual instructor prior to the examination or presentation day or on the examination or presentation day before the test/presentation is scheduled to be given.

It is the responsibility of the student to contact the appropriate instructor to arrange to make up the examination. Arrangements may be completed by telephone. If the instructor is not available, a message should be left on the instructor's voice mail AND with another member of the faculty or administrative assistant. The instructor will decide the time and method of make-up examinations on an individual basis.

Messages sent by other students are unacceptable. The student is responsible for notifying the instructor of the reason for the absence.

Course Policies and Procedures

1. It is clearly to the advantage of the student to attend class regularly. Test materials are weighted heavily in favor of lecture materials.

***All students are required to remove hats and ALL watches of any kind during exams and quizzes and place them in the front of the classroom with personal belongings and electronics.**

***During on campus examinations, only answers transferred and completed on Scantron sheets will be graded electronically to count towards the test score.**

Clinical assignments, worksheets, and course reviews may be available on the Blackboard platform for student completion and review. If an online review is given, TCL utilizes the online test proctoring service **Honorlock**. Each student must meet the requirements for Honorlock to complete any online clinical assignments and/or course reviews.

- Honorlock Online Proctoring and Technology Requirements
TCL uses an online test proctoring service called Honorlock to monitor some online tests as an alternative to in-person proctoring. Your instructor may elect to have some of your tests proctored using Honorlock. If so, you will need to make sure that you have access to the necessary equipment to take your online-proctored tests:
 - A computer with access to a high-speed Internet connection
 - The ability to install the Honorlock extension on Google Chrome.
 - A webcam and microphone. A functioning webcam and microphone are required to complete proctored online tests.
 - Microsoft Office. Microsoft Office can be downloaded for free by accessing the Office 365 link in your TCL email account.
2. **All cell phones and pagers must be turned off during class (lecture and laboratory periods).** No pagers or phones are allowed in the clinical area. No exceptions are made to this rule.
 3. Students are held accountable for content in the **Surgical Technology** program student handbook.
 4. Instructors will excuse a student from class who disrupts the class.
 5. No course grades are posted in public areas. Grades are available through TCL's Self-Serve/grades. For questions, contact the TCL Help Desk at 525-8344 or the Registrar's office at 525-8210.

**Course Coordinator: Ashley Sumner, CST
Surgical Technology Instructor**

Office Hours:
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