SUR112
Surgical Practicum I
SU 2014

Course Description
SUR 112 Surgical Practicum I
Lec. 2 Lab. 6 Cr. 4
This course includes the application of preoperative theory under clinical supervision.
Prerequisites: CPT 101 or CPT 170, ENG 101, PSY 201, SUR 103, SUR 104,
SUR 106, and AHS 121.

Course Focus
Emphasis is placed on the scrub and circulating roles of the Surgical Technologist including aseptic
technique and basic case preparation for select surgical procedures. Upon completion, students should
be able to prepare, assist with, and dismantle surgical cases in both the scrub and circulating/assisting
roles. In addition, a system to system approach to surgical procedures and related anatomy, pathology,
specialty equipment, team responsibility, patient safety, and specific pharmacology used in Plastic and
Reconstructive surgery, Peripheral Vascular surgery and Cardiovascular surgery will be discussed.
Plastic/Reconstructive, Peripheral Vascular and Cardiovascular surgical procedures will also be
addressed.

Text and References
   of Surgical Technologists.
Course Outcomes
Upon successful completion of this course, the student will be able to: Discuss the relevant anatomy, indications for surgery, patient preparation, special equipment and supplies, purpose and expected outcomes, and possible complications for the procedures in the surgical specialties of Plastic/Reconstructive, Peripheral Vascular surgery and Cardiovascular Surgery. In addition, the student will have reviewed the areas of: 1) Administrative and personnel duties, 2) Equipment sterilization and maintenance, 3) Anatomy and physiology, and 4) Microbiology in preparation for the national certification exam.

Course Goals
The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. indicate surgical instruments supplies and drug uses
2. evaluate preoperative patient checklist
3. illustrate peripheral vascular relevant anatomy
4. demonstrate surgical identification process
5. define thoracic related terminology
6. recognize respiratory system anatomy
7. assess preoperative intraoperative and postoperative patient care variations
8. recognize immediate postoperative care needs
9. recognize possible surgical procedure complications
10. interpret expected outcomes
11. interpret surgical procedure purpose
12. prepare lab supplies
13. determine intraoperative patient preparation
14. demonstrate safe patient transportation methods
15. name surgical supplies and drugs
16. determine preoperative diagnostic procedures
17. determine preoperative preparation procedures
18. summarize surgical intervention pathology
19. discuss possible surgical complications
20. utilize special equipment and supplies
21. discuss surgery indications
22. discuss surgical purpose
23. weigh expected outcomes
24. complete patient preparation
25. define cardiovascular surgery terminology
26. define peripheral vascular terminology
27. illustrate cardiovascular relevant anatomy
28. summarize surgical steps
29. describe or emergency procedures

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30. select surgical instruments
31. review assigned cases
32. utilize sterile principle techniques
33. wear protective eyewear
34. wear surgical technologist attire
35. assist surgeon
36. breakdown case setup
37. perform catheterization
38. prepare intraoperative catheter and drains
39. use proper documentation
40. address surgical patient needs
41. assess surgical team needs
42. review patient chart
43. perform patient homeostatic parameter monitoring
44. position or furniture and equipment
45. employ surgical scrub techniques
46. collect case supplies instruments and equipment
47. employ donning surgical attire principles
48. follow surgical skin preparation steps
49. perform basic positioning
50. explain anesthesia preparation components
51. identify safe transfer equipment
52. employ body mechanic principles
53. utilize patient transfer methods
54. analyze informed consent legal concepts
55. analyze informed consent procedure
56. monitor sterile field

**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.
GRADING POLICY

<table>
<thead>
<tr>
<th>Grading scale</th>
<th>W</th>
<th>WP</th>
<th>WF</th>
<th>I</th>
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</thead>
<tbody>
<tr>
<td>90% - 100% A</td>
<td>withdraw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>82% - 89% B</td>
<td></td>
<td>withdraw with passing grade</td>
<td></td>
<td></td>
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<tr>
<td>75% - 81% C</td>
<td></td>
<td></td>
<td>withdraw with failing grade</td>
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<tr>
<td>70% - 74% D</td>
<td></td>
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<td></td>
<td>Incomplete</td>
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<tr>
<td>Below 70% F</td>
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</tbody>
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Grading Methodology. The final grade must be 75.000 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 make-up exam will be scheduled on the day of the course final; the instructor will decide the method of examination. Messages sent by other students are unacceptable. The student is responsible for notifying the instructor for the reason of the absence.

ATTENDANCE

The College’s statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.

1. 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.

2. 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.

3. 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.

   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.

4. A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.

5. 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.

6. 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 insure that attendance is marked. The student is responsible for all material/announcements presented, whether present or absent.

7. 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 absence does occur, the designated clinical site, in addition to the Division of Health Sciences Administrative Assistant, must be notified by telephone no later than 30 minutes prior to the start of the clinical experience. The Division of Health Sciences telephone number is 843-525-8267.

8. Absences from the clinical area are strongly discouraged. The attendance policy applies to clinical activities. “No call, no show” for clinical is unprofessional conduct and the student will be withdrawn from the program with a WF.

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, WZGR 104.9, WFXH 1130 AM, WLHV 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. www.tcl.edu/textalert.asp

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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.

Course Evaluation

2 Unit Tests (20%)  40%
3 Quizzes (10%)   30%
Final Exam (30%)  30%

Practice Exams/Clinical Documentation

In July, 2014, students will take the second of two on-line practice exams in preparation for the national certification exam. Each test consists of 175 multiple choice questions related to information presented throughout the surgical technology courses. Students who do not achieve a minimum score of 115 will be required to meet with the program director and complete the prescribed remediation. Required remediation is due prior to the final exam. Failure to complete the testing or required remediation by the established dates will result in a grade of Incomplete (“I”) for the course and non-progression in the
surgical technology program. Students having difficulty with either the test or remediation components of this course must meet with the program director three (3) business days or more in advance of the established due dates.

The clinical portion of this course is evaluated on the formative and summative clinical evaluation. The clinical component of the course is evaluated as satisfactory or unsatisfactory. An unsatisfactory in the clinical portion of the course results in the failure of the course even if the theory grade is 75 or higher. Students are to review the cases they have been assigned the night before clinical and a review card is to be completed for each clinical day. These cards will be reviewed by the program instructor and/or the clinical adjunct throughout each clinical rotation. Case logs are to be completed as individual case specific criteria has been met (solo scrub or first scrub) and the case is to be entered into DataArc by Monday of the following week. Each student will attempt to meet the 120 cases established in the 6th Core Curriculum by the completion of the last clinical rotation. Each student will receive a clinical evaluation for each clinical rotation.

The clinical paperwork component of the course is evaluated as **satisfactory** or **unsatisfactory**. An **unsatisfactory** will result in a verbal warning by the program director and/or clinical adjunct. A second **unsatisfactory** will result in a written Learning Contract. A third **unsatisfactory** will result in the implementation of disciplinary action. Clinical paperwork encompasses:

1. Review Card (yellow/green book)
2. Weekly Case Log Form
3. Procedure Case Card info inputted into DataArc.

All clinical paperwork is to be turned in by the student each Monday during the clinical rotation period by 10:00am. All paperwork due on Monday is to be placed in the box of the clinical adjunct, located in Room 115 of the Health Sciences building. Any late, incomplete, illegible, or misspelled Review Card (Book) or Weekly Case Log will be considered **unsatisfactory**, and appropriate measures will apply. All revised clinical documentation is due on Thursday of the week of initial submission, in the box of the clinical adjunct in Room 115 of the Health Sciences building, by 10:00am.

**Course Schedule**

Lecture: Class - Monday 9:00am - 12:00pm  
Clinical: Tuesdays, Wednesdays, and Thursdays - 6:45am - 3:15pm

**Course Structure**

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

**Clinical Experience**
During this course students will do a three-day a week, seven week rotation at a designated facility. The summer clinical assignment will take place at one facility and will be included in SUR 112 and SUR 113. They are responsible for their own transportation to and from clinical. Each clinical day is 8 hours. Students are required to sign in and sign out in the attendance log provided at each site.

In order to perform at a satisfactory level in the clinical area, students must be prepared, on a daily basis, to do the following:

- Complete surgical cases with the assigned preceptor;
- Complete case preparation notebook
- Arrive on time and in proper attire;
- Accurately perform surgical technology skills;
- Correctly apply all previously mastered knowledge, skills, and abilities.

Students not prepared to complete his/her assigned case(s) will be given an unsatisfactory for the day. A learning contract will be implemented as a result of the unsatisfactory performance.

**Other Required Materials**

TCL student uniforms, name pin, & college picture student ID
Pocket size notebook
Review cards
Eye protection
Dosimeter badge

**Web-based Review Content Outline**

A. Administrative and Personnel
   1. Revise surgeon’s preference card as necessary
   2. Utilize computer technology
   3. Follow disaster and emergency plan protocols
   4. Recognize safety and environmental hazards
   5. Follow proper cost containment processes
   6. Apply ethical and legal practices related to surgical patient care
   7. Use interpersonal skills
   8. Understand the importance of cultural diversity
   9. Serve as preceptor to perioperative personnel

B. Equipment Sterilization and Maintenance
   1. Operate sterilizing devices according to manufacturers recommendations
   2. Troubleshoot equipment malfunctions
   3. Decontaminate and clean instruments and equipment
   4. Package and sterilize instruments and equipment
   5. Perform quality assurance functions
   6. Maintain equipment records and logs

C. Anatomy and Physiology
   1. Use appropriate medical terminology and abbreviations
   2. Demonstrate knowledge of the following anatomical systems as they relate to the surgical procedure

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3. Demonstrate knowledge of human physiology as it relates to the surgical procedure
4. Identify the following surgical pathologies
D. Microbiology
   1. Apply the following principles of surgical microbiology to operative practice:
      • Classification and pathogenesis of microorganisms
      • Factors influencing wound healing
      • Infection control procedures
      • Principles of tissue handling
      • Stages of, and factors influencing wound healing
      • Surgical wound classification
   2. Identify and address factors that can influence an infectious process

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ADDENDUM TO SUR 112 SYLLABUS

SURGICAL PROCEDURES – DIDACTIC

CARDIOTHORACIC

Content:

I. Thoracic
   A. Bronchoscopy
   B. Mediastinoscopy
      1. Lymph node biopsy
   C. Thoracoscopy
      1. Video assisted thoracoscopy
   D. Thoracotomy
      1. Lobectomy
      2. Pneumonectomy
      3. Decortication of the lung
      4. Lung transplant
      5. Pectus excavatum repair
      6. Pulmonary embolectomy

II. Cardiothoracic
   A. Aortic/mitral valve replacement
   B. Atrial/ventricular septal defect repair
   C. Cardiac
      1. Closure of patent ductus arteriosus
      2. Coronary artery bypass graft (CABG)
         a. Intra-aortic balloon pump
         b. Minimally invasive direct - CABG (MID-CABG)
         c. Off pump CABG
         d. Ventricular assistive device (VAD) insertion
      3. Heart transplant
      4. Repair of coarctation of the aorta
      5. Tetralogy of Fallot repair
      6. Ventricular aneurysm repair
PERIPHERAL VASCULAR

Content:
I. Abdominal aortic aneurysm with graft insertion
II. Angioplasty
   A. Endograft placement
   B. Endostent insertion
III. Angioscopy
IV. AV shunts and bypass
   A. Aortofemoral bypass
   B. Arteriovenous fistula and shunt
   C. Femoropopliteal bypass
V. Carotid endarterectomy
VI. Embolectomy
VII. Vena cava device
VIII. Vein ligation and stripping
IX. Venous access device