



INSTRUCTIONAL PACKAGE

SUR 102
Applied Surgical Technology

FALL 2021
202110

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: 202110

COURSE PREFIX: SUR102

COURSE TITLE: Intro to Surgical Technology

CONTACT HOURS: 5

CREDIT HOURS: 5

RATIONALE FOR THE COURSE:

This introductory level course is designed to continue the principles and application of case preparation, aseptic techniques, patient safety, medical legal aspects of the operating room, the perioperative role, supplies, equipment, and instrumentation related to basic, intermediate and advanced surgical procedures.

COURSE DESCRIPTION:

This course covers the principles and application of aseptic technique, the perioperative role, and medical/legal aspects.

PREREQUISITES/CO-REQUISITES:

Meet the criteria for admission to HGTC. This includes submission of application fee; official high school transcript, including graduation date or copy of GED:

- Meet minimum placement test scores from one of the following tests: SAT, ACT or Accuplacer, the College placement test (the Developmental Studies course sequence with a minimum grade of B will be required if minimum placement test scores are not achieved)
- Transfer students must meet the College transfer student admission requirements
- Completion of BIO 210, BIO 211 and BIO 225 with a minimum grade of "C"
- Completion of AHS 102 Medical Terminology with a minimum grade of "C"
- SUR 101 Introduction to Surgical Technology
- Complete the criminal background check and drug screening requirements
- Current CPR certification (Health Care Provider)
- Submit a complete Health Sciences Division Physical Examination Form.

REQUIRED MATERIALS:

Textbooks:

1. Surgical Technology for the Surgical Technologist: A Positive Care Approach 5th Ed. Delmar Cengage Learning, 2017 ISBN-13: 978-1-305-95641-4
2. Cengage Mindtap Access Unlimited
3. Surgical Instrumentation; An Interactive Approach 3rd Edition Elsevier 2019 ISBN: 978-0-323-52370-7

2021-2022

4. Surgical Equipment and Supplies by Colleen J. Rutherford 2nd Edition FADAVIS ISBN: 978-0-8036-4571-4
5. Pocket Guide to the Operating Room 4th Edition ISBN 978-0-8036-6839-3
6. Laparotomy pack from B&N /Henry Shein
7. Lange Q and A Surgical Technology Examination 7th Edition by Mary Chmielewski and Carolan Sherman ISBN-13-978-1-2595-8-8112

Please visit the [BOOKSTORE](#) online site for most current textbook information. Use the direct link below to find textbooks.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

1. White Lab Coat (See SUR 101 IP)
2. Business Casual Attire: Dress Pants (Navy Blue, Black, or Khaki), Dress Shirt: Ciel Blue, White, or Black. (Students Can wear a Surgical Technology Class Shirt, HGTC School shirt or Hoodie in place of the dress shirt)
3. Tennis shoes (Black or White), Nursing Shoes (Black or White) or Dress shoes (Black or Brown).
4. Lanyard
5. School ID
6. Blue and Orange Highlighters
7. Sticky Notes
8. Note Cards
9. Flash Drive

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.
myHGTC and college email access.

Each Student will need access to a compatible Computer/Laptop, and Printer/Scanner.

STUDENT IDENTIFICATION VERIFICATION:

Students are required to wear their student ID during all Lecture, Lab and Clinical courses.

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

No cell phones allowed in lab.

There will be no talking when the instructor is talking. Each student will receive only one warning.

After the initial warning, the student will be asked to leave the classroom, will receive a critical u, and will be marked absent. As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate. No cell phones allowed in lab.

Questions are encouraged during class but they need to be subject related. Question that are not related to the material being covered will be viewed as a disruption and the student will be asked to leave the classroom and will receive an absence along with a critical U write up. Two critical U's will result in dismissal from the program.

Any student that is insubordinate to an instructor will be removed from the classroom and receive a critical U and an absence for the day.

Any student who uses threatening language or action towards an instructor or fellow student will be removed from the program. Please refer to the critical U paperwork for additional disciplinary protocol.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit [Online Netiquette](#).

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Program Cognitive Objective: At the completion of the program, the graduate of Horry Georgetown Technical College Surgical Technology Program will demonstrate the ability to comprehend, apply, and evaluate the clinical information relative to his role as an entry level Surgical Technologist in Horry and Georgetown counties.

Program Psychomotor Objective: At the completion of the program, the student will demonstrate technical proficiency in all skills necessary to fulfill the role of entry level Surgical Technology in Horry and Georgetown counties.

Program Affective Objective: At the completion of the program, the student will demonstrate personal behaviors consistent with professional and employer expectations for the entry level Surgical Technology in Horry and Georgetown counties.

Materials Covered:

- Lecture: Surgical Technology for the Surgical Technologist (ST4ST)
 - CH 2: Legal Concepts, Risk Management, and Ethical Issues
 - CH 5: Physical Environment and Safety Standards
 - CH 6: Biomedical Science
 - CH 8: Emergency Situations, and All Hazards Prep
 - CH 9: Surgical Pharmacology and Anesthesia
 - CH 13: Diagnostic Procedures
- Lab: Surgical Instrumentation (An Interactive Approach) (ELSEVIER)

- CH 1: Introduction of Surgical Instruments
- CH 2: Basic Instruments
- CH 3: General Instruments
- CH 4: Laparoscopic Instruments
- CH 5: Robotic Instruments
- CH 6: Obstetric and Gynecologic Instruments
- CH 7: Genitourinary Instruments
- CH 8: Ophthalmic Instruments
- CH 9: Otorhinolaryngology Instruments
- CH 10: Oral Instruments
- CH 11: Plastic and Reconstructive Instruments
- CH 12: Orthopedic Instruments
- CH 13: Neurosurgical Instruments
- CH 14: Cardiovascular Thoracic Instruments
- CH 15: Surgical Setups

Lab: Differentiating Surgical Equipment and Supplies (FA DAVIS)

- CH 1: Instrument Preparation for Surgery
- CH 2: General Surgery Set ups, Supplies, and Drains.
- CH 3: Female Reproductive System
- CH 4: Genitourinary System and Catheters and Lasers
- CH 5: Orthopedic Surgery, Casting material and Splints, Cement mixers and PMMA
- CH 6: Eye, Ear, Nose, and Throat Surgery Anesthesia Equipment and Tubes
- CH 7: Oral, Maxillary, and Facial Surgery
- CH 8: Plastic Surgery and Sutures and Suture Needles
- CH 9: Peripheral Vascular, Cardiovascular, and Thoracic Surgery
- CH 10: Neurosurgery

Assessment(s): Lecture:

- Writing Assignments
- Homework/ Workbook Assignments
- Chapter Tests.
- Cumulative Exam

Lab:

- Homework
- Group Projects
- Competency Instrumentation and Equipment Practical
- Unit Tests
- Cumulative Exam

Learning Outcomes:

1. Interpret the legal responsibilities of the surgical technologist and other surgical team members.
2. Analyze the American Hospital Association's Patient Care Partnership (Patient Bill of Rights)
3. Analyze the Role of Morality during ethical decision making.
4. Assess errors that may occur in the operating room and devise a plan for investigation, correction, and notification.
5. Assess resources that aid the surgical technologist in interpreting and following professional standards of conduct.

6. Apply principles of problem solving in ethical decision making.
7. Analyze scope of practice issues as they relate to surgical technology.
8. Evaluate the role of the risk management department in the health care facility.
9. Describe the need for professional liability insurance policies.
10. Recognize the design types of the OR
11. Recognize the working environment of the OR
12. Determine the physical components of the OR
13. Review the type of air handling system required in the OR and the temperature and humidity required to maintain a sterile field.
14. Classify hospital departments that relate to surgical services.
15. Recognize basic components of a computer system.
16. Perform basic word processing, Internet, and email functions.
17. Apply Computer knowledge to safe patient care.
18. Cite the basic principles of electricity and their application in the OR
19. Apply Electrical safety precautions.
20. Interpret terms related to physics.
21. Apply principles of physics to safe patient care practices in the OR
22. Demonstrate the preparation and use of appropriate agents or devices.
23. Review Cardiopulmonary Resuscitation
24. Discuss Malignant Hypothermia and its causes.
25. Discuss Disseminated Intravascular Coagulation
26. Discuss anaphylactic Reactions.
27. Recognize developing emergency situations and initiate the appropriate action (6th Core)
28. Apply knowledge of radiological and chemical injuries to treatment of the patient (6th Core)
29. Apply knowledge of biological injuries to the treatment of the patient (6th Core)
30. Discuss the various roles a surgical technologist can fill during emergency situations (6th Core)
31. Discuss the types of natural disasters (6th Core)
32. Discuss the types of man-made disasters (6th Core)
33. Discuss natural disaster planning for the nation and state (6th Core)
34. Discuss natural disaster planning for the hospital and the operating room (6th Core)
35. Discuss the initial response to an all-hazard event (6th Core)
36. Recognize general terminology and abbreviations associated with pharmacology and anesthesia.
37. Assess the action, uses and modes of administration of drugs used in the care of the surgical patient.
38. Recognize the side effects and contraindications for the use of drugs.
39. Convert measurements from one system to another and accurately identify, mix, and measure drugs for patient use.
40. Demonstrate the precautions in identifying drugs and solutions in the OR
41. Demonstrate safe practice in transferring drugs and solutions from the nonsterile area to the sterile field.
42. Demonstrate the procedure for identifying a drug or solution on the sterile field.
43. Indicate the sources of patient data.
44. Apply knowledge of anatomy and physiology to determine which diagnostic examination will be useful.
45. Demonstrate knowledge of the surgical technologist's role in caring for each specific type of

specimen.

46. Discuss documentation in the surgical setting.
47. Compare and contrast techniques used to establish the diagnosis.
48. Determine which diagnostic procedures will require surgical intervention.

Lab:

1. Recognize Basic instruments by type, function, and name.
2. Identify specialty instruments and supplies unique to surgical procedures.
3. Demonstrate proper care, handling, and assembly of instruments.
4. Differentiate the types of special equipment utilized in the OR practice and demonstrate proper care, handling techniques and safety precautions.
5. Cite the names and functions of accessory equipment and demonstrate proper care, handling and assembly.
6. Collect and prepare supplies used in the OR
7. Associate the relationship between instrumentation, equipment and supplies with quality patient care in the OR
8. Identify the relationship between instruments, equipment and supplies and the OR environment and related to safety.
9. Cite and interpret common suture terms.
10. Recognize the types, characteristics and uses of natural and synthetic absorbable suture materials.
11. Compare and recognize the common natural and synthetic nonabsorbable sutures.
12. Classify and differentiate suture materials and stapling devices and their uses.
13. Summarize the basic uses and advantages of stapling instruments.
14. Recognize basic supplies by type, function, and name.
15. Cite the names of different sponges and specific number found in a package.
16. Recognize the difference between tubes, catheters, and drains.
17. Recognize and identify the different medical gases and use.
18. Identify and demonstrate how to operate endoscopic equipment.
19. Compare and contrast the different types of sterilization.
20. Discuss the principles and guidelines of Aseptic Technique.

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*:

Students’ performance will be assessed, and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

[LECTURE: 80%]

UNIT TESTS (6)	60%
ASSIGNMENTS (2)	10%
FINAL EXAM	<u>30%</u>
	100%

[LAB: 20%]

TESTS (10)	60%
ASSIGNMENTS	10%
FINAL PRACTICUM	<u>30%</u>
	100%

****Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.***

GRADING SYSTEM:

93-100 = A 85 - 92 = B 77 - 84 = C 69 - 76 = D 68 or below = F

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

- Attendance will be taken each class.
- No more than three (3) absences will be allowed.
- More than three (3) absences will result in withdrawal from the program by the instructor or withdrawal by the student.
- Anyone leaving more than THIRTY (30) MINUTES prior to the end of class will be marked as a class absence.
- The student will be responsible for any information given out while not in class.

TARDY POLICY:

- Any student that comes to class late three times will receive one absence.

After the allowed number of tardies/absences, the student will be dropped from the course with a W or a WF.

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes to receive credit for any course. Due to the

varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, and if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **free** resources:

1. **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2. Online **tutoring** and academic support resources.
3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring, contact the SSTC at ssc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email ssc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.

Dedicated Surgical Technology Tutor:
Mark Sowers: Mark.Sowers@hgtc.edu



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following **free** resources:

1. **Getting around HGTC**: General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. Use the [Online Resource Center \(ORC\)](#) including Office 365 support, password resets, and username information.

3. **In-person workshops, online tutorials and more services** are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
4. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central’s website, or by texting questions to (843) 375-8552.

Visit the [Tech Central](#) website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #2.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC’s [Accessibility and Disability Service webpage](#). The Accessibility and Disability staff will review documentation of the student’s disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student’s responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college’s Chief Student Services Officer, campus law enforcement, or with the college’s Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX Coordinator

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources

EEO and Title IX Coordinator

Building 200, Room 212A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@hgtc.edu