



Course Number and Title: SGT 210 Surgical Technology II

Campus Location:

Dover

Effective Date:

2018-53

Prerequisite:

SGT 200, SGT 202, SGT 203

Co-Requisites:

SGT 213

Course Credits and Hours:

4.00 credits

4.00 lecture hours/week

0.00 lab hours/week

Course Description:

This course covers the responsibilities of the surgical technologist in preoperative, intraoperative, and postoperative case management. Topics include the skills for effective performance as a non-scrubbed and scrubbed member of the operating room team.

Required Text(s):

Obtain current textbook information by viewing the [campus bookstore - https://www.dtcc.edu/bookstores](https://www.dtcc.edu/bookstores) online or visit a campus bookstore. Check your course schedule for the course number and section.

Additional Materials:

None

Schedule Type:

Classroom Course

Disclaimer:

None

Core Course Performance Objectives (CCPOs):

1. Explain all-hazards preparation and the various considerations for a surgical technologist in a disaster situation. (CCC 1, 2, 3,4,5, 6; PGC 2, 4, 5)
2. Describe the function, assembly, and use of specialty surgical equipment. (CCC 2, 6; PGC 2, 4, 5)
3. Describe surgical procedures for managing surgically treatable diseases and disorders in the specialty areas of ophthalmology, otorhinolaryngology, and neurosurgery. (CCC 1, 2, 3, 4, 5, 6; PGC 1, 2, 3, 4, 5)
4. Describe the practices for proper decontamination, sterilization, and disinfection. (CCC: 1, 2, 4, 5. PGC: 2, 4, 5)

See Core Curriculum Competencies and Program Graduate Competencies at the end of the syllabus. CCPOs are linked to every competency they develop.

Measurable Performance Objectives (MPOs):

Upon completion of this course, the student will:

1. Explain all-hazards preparation and the various considerations for a surgical technologist in a disaster situation
 1. Describe the different types of disasters or public health emergencies that impact public health, and discuss the general health, safety, and security risks.
 2. Describe the all-hazards framework.
 3. Explain key components of personal, family, institution, community, and regional disaster preparation and planning as related to informational resources, special needs, precautions and actions for protection, detection, immediate response, short-term interventions, and long-term interventions.
 4. Describe communication strategies and procedures used in disasters.
 5. Describe the purpose and relevance of disaster support services, including the rationale for integration and coordination of all systems, including the National Response Framework (NRF), the National Incident Management System (NIMS), and the Hospital Incident Command System (HICS).
 6. Describe the potential impact of mass casualties on healthcare resources with respect to infection control, personal protective equipment, and decontamination.
 7. Explain the role of triage as the basis for prioritizing and rationing healthcare services.
 8. Describe the possible medical and mental health consequences, interventions, and solutions for managing those affected.
 9. Explain basic lifesaving and life support principles and procedures used at a disaster scene.
 10. Describe the support roles of the surgical technologist in a disaster.
2. Describe the function, assembly, use, and use of specialty surgical equipment.
 1. Discuss the assembly, use, and care for instruments such as laser equipment, harmonic scalpel, and other specialty equipment.
 2. Identify the basic components of equipment used in robotic surgery.
 3. Describe the robotic terms as related to surgery.
 4. Describe the surgical applications of robotics.
 5. Identify the basic components of equipment used in robotic surgery.
 6. Describe the movements of the robotic system manipulators.
 7. Apply the principles of robotics to patient safety.
 8. Explain how to set up equipment applying the principles of electricity and electrical flow to maintain patient safety.
3. Describe surgical procedures for managing surgically treatable diseases and disorders in the specialty areas of ophthalmology, otorhinolaryngology, and neurosurgery.
 1. Determine the anatomy, physiology, and pathophysiology relevant to the surgical procedures.
 2. Describe the diagnostic interventions used to formulate a diagnosis.
 3. Locate and evaluate information using the latest technology available.
 4. Discuss factors that are unique to the following ophthalmologic surgical procedures: chalazion excision, dacryocystorhinostomy, entropion/extropion repair, enucleation, extracapsular cataract excision, iridectomy, keratoplasty, laceration repairs, scleral buckle, strabismus correction, and vitrectomy.
 5. Discuss factors that are unique to the otorhinolaryngologic surgical procedures: cochlear implant, mastoidectomy, myringotomy, stapedectomy, tympanoplasty, choanal atresia, endoscopic sinus surgery, nasal anrostomy, nasal polypectomy, septoplasty, turbinectomy, laryngectomy, parotidectomy, radical neck dissection – glossectomy and mandibulectomy, temporomandibular joint arthroplasty (TMJ), tonsillectomy and adenoidectomy, tracheotomy and tracheostomy, and uvulopalatopharyngoplasty.
 6. List the supplies, equipment, and instrumentation needed for each specialty procedure.
 7. Discuss the perioperative care of the patient for each specialty procedure, including positioning.
 8. Describe the preparation, insertion, and anchoring of various catheters and drains.
 9. Describe the etiology, clinical manifestations, clinical, and pharmacologic interventions and preventative measures of emergency procedures that may be carried out in the operating room (OR) setting, including malignant hyperthermia, cardiac arrest, hemolytic reaction, anaphylactic reaction, and hemorrhage.
4. Describe the practices for proper decontamination, sterilization, and disinfection.
 1. Define terms related to the terminal disinfecting and/or sterilization process.
 2. Identify the methods of processing items during terminal disinfection and/or sterilization.
 3. Explain the concepts of microbial barriers.
 4. Compare and contrast the materials used to create a microbial barrier.
 5. List the methods for sealing microbial barriers.
 6. List the steps in the process for preparing items for sterilization.
 7. Identify the variables in the sterilization process and the materials to be processed.
 8. Compare and contrast methods of sterilization.
 9. Identify the systems used for sterile storage.
 10. Describe the proper technique for storing, handling, and distributing sterile supplies.
 11. Compare and contrast shelf life and event related sterility.
 12. Assess distribution systems used by sterile processing departments.
 13. Compare and contrast different disinfecting agents used for environmental disinfection of the operating room.

Evaluation Criteria/Policies:

Students must demonstrate proficiency on all CCPOs at a minimal 75 percent level to successfully complete the course. The grade will be determined using the Delaware Tech grading system:

92	-	100	=	A
83	-	91	=	B
75	-	82	=	C
0	-	74	=	F

Students should refer to the [Student Handbook - https://www.dtcc.edu/handbook](https://www.dtcc.edu/handbook) for information on the Academic Standing Policy, the Academic Integrity Policy, Student Rights and Responsibilities, and other policies relevant to their academic progress.

Final Course Grade:

Calculated using the following weighted average

Evaluation Measure	Percentage of final grade
Exams (3 equally weighted) (Summative)	45%
Neurosurgery Paper (Formative)	15%
Final Exam (Summative)	40%
TOTAL	100%

Core Curriculum Competencies (CCCs are the competencies every graduate will develop):

1. Apply clear and effective communication skills.
2. Use critical thinking to solve problems.
3. Collaborate to achieve a common goal.
4. Demonstrate professional and ethical conduct.
5. Use information literacy for effective vocational and/or academic research.
6. Apply quantitative reasoning and/or scientific inquiry to solve practical problems.

Program Graduate Competencies (PGCs are the competencies every graduate will develop specific to his or her major):

1. Differentiate the roles and responsibilities of all surgical team members.
2. Demonstrate the ability to anticipate the needs of surgical patients by properly preparing the operating room suite, equipment, and instrumentation required for surgical interventions.
3. Demonstrate a professional demeanor when communicating with patients and fellow team members.
4. Synthesize a surgical conscience.
5. Participate as an effective and clinically proficient member of the surgical team throughout the perioperative, intraoperative and immediate postoperative periods.

Disabilities Support Statement:

The College is committed to providing reasonable accommodations for students with disabilities. Students are encouraged to schedule an appointment with the campus Disabilities Support Counselor to request an accommodation needed due to a disability. A listing of campus Disabilities Support Counselors and contact information can be found at the [disabilities services - https://www.dtcc.edu/disabilitysupport](https://www.dtcc.edu/disabilitysupport) web page or visit the campus Advising Center.