SURGICAL TECHNOLOGY

The Associate of Applied Science in Surgical Technology prepares students to demonstrate basic entry-level skills and concepts appropriate for performing the duties of a surgical technologist. Some of the technology skills and concepts include the aseptic technique, preparation for specific surgical procedures, participation in patient and instrumentation preparation for individual surgical cases, and collaboration with interdisciplinary team members for providing high quality patient outcomes. This program prepares the student for professional readiness for employment and attaining certification status.

Surgical Technologists will have numerous job opportunities upon graduation. Surgical Technologists may also be called operating room technicians and assist in surgical operations. They prepare operating rooms, arrange equipment, and assist doctors and nurses during surgeries. Typical work settings are hospitals, outpatient surgery centers, physician offices, and dentist offices.

Program Outcomes

At the completion of the **Surgical Technology of Applied Science Associate Degree** program, the student should be able to:

1. *Integrate the Surgical Technology knowledge base in affective, cognitive, and psychomotor domains; demonstrate skills following established criteria, protocols and objectives in the affective, cognitive, and psychomotor domains.*
2. *Demonstrate, discuss, and apply appropriate Surgical Technology procedures and protocols in various health care settings and situations; react appropriately and with professional demeanor while in various health care settings and situations.*
3. *Compare, contrast, discuss, demonstrate and apply knowledge of interpersonal skills and communications relative to procedures and protocols from the Surgical Technologist perspective when working with patients, patients' significant others, colleagues, other members of the health care team, and members of the community.*
4. *Operate all equipment effectively, efficiently, and safely while using appropriate protocols.*
5. *Function effectively, efficiently, and safely in the Surgical Technologist role.*
6. *Compare, contrast, discuss, demonstrate, and apply critical thinking skills, problem solving skills, ethical behavior and knowledge of Surgical Technologists capabilities, roles, responsibilities, ethical guidelines, scope of practice, and skills in a variety of settings and with a variety of procedures.*
7. *Compare, contrast, discuss, and demonstrate skills related to information literacy; access, gather, interpret, and analyze information, and accurately report it, especially as it pertains to Surgical Technology.*
8. *Compare, contrast, discuss, and integrate an understanding and valuing of their place in the health care system, as well as for other health care professionals.*

Course information

The course number indicates whether the course is a freshman (100 level) or sophomore (200 level) course. The (3+3p) means that the class meets for 150 minutes per week for lectures and also requires 150 minutes per week of "laboratory" (practice, field work, or recitation). The suffix "G" indicates an approved general education course. The letter "N" will be added as a suffix to the course number when the course credits are not applicable to the baccalaureate and specified associate degrees.

Admission to the ST program

1. High school diploma or GED certificate.
2. Satisfactory scores on placement tests: Students who fail to make a satisfactory score on the placement tests will be required to enroll and pass the appropriate developmental class with a "C" or better. Placement test scores may not be utilized in lieu of a "D" or "F" in any developmental class.
3. **Criminal Background Checks**: Surgical Technology is a very selective medical field and criminal background checks are required for many positions per Department of Health for employment and certification. The Joint Commission also requires healthcare organizations to verify criminal background information on individuals who provide services, care, and treatment to patients/clients during practicum activities.
4. A "C" must be maintained in all ST curriculum courses to progress and/or graduate with AAS in Surgical Technology.

Students are admitted to the ST program in the Spring semester of each year. The deadline to apply for the program is 5:00 pm May 1. Students wishing to make application must complete all requirements set forth in the current application packet and submit to the Allied Health Director starting August 15th.

Graduation

The **Associate Degree of Applied Science in Surgical Technology** is conferred at the completion of the ST program. The total requirements of the program must be completed before a degree is conferred.

Pre-Surgical Technology - Certificate of Completion

- Pre-Surgical Technology - Certificate of Completion (https://senmc-public.courseleaf.com/academic-programs/associate-degree-certificate-programs/surgical-technology/surgical-technology-cc/)
- Surgical Technology - Associate of Applied Science (https://senmc-public.courseleaf.com/academic-programs/associate-degree-certificate-programs/surgical-technology/surgical-technology-aas/)

SURG 120 Surgical Technology Clinical I 4 Credits (4)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. This course is designed to prepare the student to enter the surgical environment. This course provides an introduction to the operating room, observation of surgical procedures, direct participation in the preoperative (pre-op, intra-op, post-op) preparation of individual cases and professional roles and responsibilities of individual members of the surgical team. Direct supervision is provided by the clinical professional. Repeatable: up to 4 credits.
Prerequisite(s): Admission to Surgical Technology Program necessary to enroll in the course
Corequisite(s): SURG 160, SURG 260
Learning Outcomes
1. Demonstrate of and adherence to Standard Precautions.
2. Demonstrate professional conduct and ethical practice in the clinical setting.
3. Demonstrate proper procedure for surgical scrub.
4. Demonstrate proper procedure for gowning and gloving self and others.
5. Identify and Utilize OR furniture and equipment appropriate to individual cases.
6. Demonstrate preoperative case/procedure preparation.
7. Locate basic instruments and assemble specified instrument sets.
8. Demonstrate knowledge and utilization of specialty and accessary equipment.
9. Demonstrate care, handling, and assembly of common equipment. 1
10. Create and maintain sterile field. 1
11. Identify suture materials and stapling devices. 1
12. Demonstrate preparation and handling techniques of suturing materials and stapling devices. 1
13. Demonstrate knowledge of skin preparation. 1
14. Discuss, demonstrate, and apply principles of surgical positioning. 1
15. Identify, describe, and demonstrate the principles of transportation of the surgical patient. 1
16. Define and demonstrate the handling, labeling, and containment of specimens. 1
17. Explain and perform postoperative case, instruments, and room break down and preparation.

View Course Outcomes

SURG 140 Introduction to Surgical Technology 4 Credits (4)
This is an orientation to surgical technology theory, surgical pharmacology and anesthesia, technology sciences and patient care concepts and is designed to prepare the student to enter the surgical environment with entry-level knowledge necessary to understand patient responses to disease, illness, hospitalization, surgical procedures, commonly used pharmacological and anesthetic agents, and legal, moral, and ethical issues that could be encountered in the surgical environment. Admission to Surgical Technology Program necessary to enroll in the course.
Learning Outcomes
1. Identify the physical, interpersonal, legal and ethical aspects of the perioperative environment.
2. Distinguish varied job roles and duties of surgical personnel and their responsibilities. Identify, evaluate, and perform patient care concepts.
3. The student will know that these goals have been successfully completed when he/she completes the course as evaluated by the faculty in the department.

View Course Outcomes

SURG 145 Fundamentals of Perioperative Concepts & Techniques 5 Credits (5)
This is an in-depth coverage of perioperative concepts such as aseptic/sterile principles and practice, infectious processes, wound healing and creation and maintenance of the sterile field. This course is designed to prepare the student to enter the surgical environment with entry-level knowledge of aseptic technique principles and practices, the creation and maintenance of the sterile field including equipment, supplies and instrumentation, and basic case preparation and procedures. An introduction to diseases and disease processes that may be displayed by the surgical patient and the patient's bodily responses to disease are also included. Repeatable: up to 5 credits.
Prerequisite(s): Admission to Surgical Technology Program necessary to enroll in the course
Corequisite(s): SURG 155
Learning Outcomes
1. Demonstrate principles and practices of aseptic/sterile techniques
2. Identify infectious processes and concepts of wound healing
3. Create a sterile field utilizing basic case preparation
4. Exhibit maintenance of the sterile field during procedures

View Course Outcomes

SURG 150 Surgical Procedures I 5 Credits (5)
This course is an introduction to surgical procedures and its related pathologies. Emphasis on surgical procedures related to general, obstetrics/gynecology, genitourinary, otorhinolaryngology and orthopedic surgical specialties incorporating instruments, equipment. It is designed to prepare the student to function actively in the surgical environment with entry-level knowledge of surgical procedures. This course expands the basic foundation principles and combines the study of common surgical procedures to include anatomy, physiology and pathophysiology. Specific patient care concepts, medications, instrumentation, equipment, supplies and complication related to selected surgical procedures will be discussed. Prequisite(s): Admission to Surgical Technology Program necessary to enroll in the course.
Corequisite(s): SURG 140
Learning Outcomes
1. Identify the physical, interpersonal, legal and ethical aspects of the perioperative environment.
2. Distinguish varied job roles and duties of surgical personnel and their responsibilities. Identify, evaluate, and perform patient care concepts.
3. The student will know that these goals have been successfully completed when he/she completes the course as evaluated by the faculty in the department.

View Course Outcomes

SURG 155 Pharmacology for the Surgical Technology 2 Credits (2)
This is an orientation to surgical pharmacology and anesthesia and is designed to prepare the student to enter the surgical environment with knowledge necessary to categorize the classification of drugs, calculate drug dosages and identify the therapeutic use, routes of administration, indications, contraindications and adverse effects of pharmacologic agents used in the perioperative setting. This course is the foundation for the acquisition of program specific competencies as identified by the AST Core Curriculum. Admission to Surgical Technology Program necessary to enroll in the course.
Corequisite(s): SURG 145
Learning Outcomes
1. Discuss basic concepts of surgical pharmacology and anesthesia
2. Analyze principles of anesthesia administration and explain the necessity of each component of anesthesia preparation of the surgical patient;
3. Compare and contrast methods, agents and techniques of anesthesia administration and preparation
4. Correlate anesthesia monitoring devices with patient homeostasis
5. Explain anesthesia complications and interventions
6. Calculate medication conversions and dosages
7. Apply general terminology to medication use
8. Prepare and manage medications and solutions
9. Identify medications in the care of the surgical patient

View Course Outcomes

SURG 160 Surgical Procedures II 6 Credits (6)
This is an introduction to surgical procedures and related pathologies. Emphasis on surgical procedures related to thoracic, peripheral vascular, plastic/reconstructive, ophthalmology, cardiac and neurological surgical specialties incorporating instruments. The course is designed to prepare the student to continue to function actively in the surgical environment with entry-level knowledge of more complex surgical procedures. This course expands the basic foundation principles and combines the study of complex surgical procedures to include anatomy, physiology, and pathophysiology. Specific patient care concepts, medications, instrumentation, equipment, supplies, and complications related to specific surgical procedures will be discussed. Realities of clinical practice and concepts of death and dying will also be discussed. Admission to Surgical Technology Program necessary to enroll in the course.
Prerequisite(s): SURG 150 Corequisite(s): SURG 120
Learning Outcomes
1. Demonstrate principles and practices of aseptic/sterile techniques
2. Relate pathophysiology to the noted surgical interventions
3. Analyze the relationship between cell pathology and disease
4. Examine hemodynamic disorders, inflammation and infection
5. Compare and contrast the various surgical pathologies of each of the following body systems.
6. The student will know that these goals have been successfully completed when he/she completes the course as evaluated by the faculty in the department.

View Course Outcomes

SURG 230 Professional Readiness 2 Credits (2)
This course transitions the student into professional readiness for employment, professional readiness for attaining certification and professional readiness for maintaining certification status. Admission to Surgical Technology Program necessary to enroll in the course.
Prerequisite(s): SURG 140, SURG 145, SURG 120, SURG 150, SURG 260, SURG 160, SURG 265
Learning Outcomes
1. Apply the theory, concepts and skills involving specialized materials, tools, equipment, procedures as they relate to the occupation and the business/industry
2. Apply the theory, concepts and skills involving regulations, laws, and interactions within and among political, economic, environmental, social and legal systems associated with the occupation and business/industry
3. Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills
4. Demonstrate appropriate use of written, verbal and non-verbal communication skills using terminology of the occupation and the business/industry

View Course Outcomes

SURG 260 Surgical Technology Clinical II 4 Credits (4)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course is designed to provide the student the opportunity to functional actively in the role as a surgical technologist and health care team member in a clinical setting under the direct supervision of faculty and health care staff. Applications of basic principles and practices combined with a supervised clinical experience participating in common surgical procedures is the focus. Admission to Surgical Technology Program is necessary to enroll in the course. (12P)
Prerequisite(s): SURG 120, SURG 140, & SURG 145
Learning Outcomes

1. Apply the theory, concepts and skills involving specialized materials, tools, equipment, procedures as they relate to the occupation and the business/industry
2. Apply the theory, concepts and skills involving regulations, laws, and interactions within and among political, economic, environmental, social and legal systems associated with the occupation and business/industry
3. Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills
4. Demonstrate appropriate use of written, verbal and non-verbal communication skills using terminology of the occupation and the business/industry

View Course Outcomes

SURG 265 Surgical Technology Clinical III 4 Credits (4)
This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. This course is designed to provide the student the opportunity to function actively in the role of a surgical technologist and health care team member in a clinical setting under the direct supervision of faculty and health care staff. Refinement and application of basic principles and practices combined with entry-level employment competency expectations is the focus. Preparation for the National Certification Examination for Surgical Technologists is also included. Admission to Surgical Technology Program necessary to enroll in the course.
Prerequisite(s): SURG 260
Learning Outcomes

1. See course syllabus.

View Course Outcomes