



Surgical Technology

Organization Washburn Institute of Technology

Program Number 51.0909

Instructional Level Certificate

Target Population

Post-secondary

Description

This program provides an opportunity for the students to learn the basic skills necessary to become an integral member of the surgical team. Surgical technologists maintain the operating room by selecting and opening supplies, assembling equipment for surgical procedures, and by providing the necessary sterile items to the surgeon in an efficient manner. Upon satisfactory completion of the program the, the surgical technologist may earn the CST certification credential by passing a nationally administered exam.

NOTE: Some clinical hours will need to be finished in the weeks following the graduation ceremony. Students may participate in commencement exercises prior to completion of the program but will only receive their graduation certification upon completion of all program requirements.

Entry Requirements

WorkKeys®	Applied Math	Level 5
WorkKeys®	Reading for Information	Level 6

Submit 3 letters of recommendation on school supplied form, with 1 preferred from a health care professional.

Complete and pass a Cardio Pulmonary Resuscitation (CPR) course for "the healthcare worker" and maintain it throughout the surgical technology program.

Complete an interview with the surgical technology program director.

Must pass a background check.

Must provide validation of all required health information before the first day of class including current physical, TB skin test and all required immunizations.

Submit official transcript from high school and all colleges attended.

If appropriate submit official GED certificate from the state.

Assessment Plan

Assessment is an integral part of the educational process at Washburn Tech and accurate feedback is an important tool in continuously improving the institution's technical programs. Students can expect to participate in assessment activities prior to entry into programs, within specific courses and following program completion for specific fields of study.

Student Learning Outcomes

- A. Communicate effectively.
- B. Integrate technology.
- C. Learn effectively - use academics effectively.
- D. Demonstrate cooperative/teamwork skills.
- E. Apply safety.
- F. Think critically and creatively.
- G. Demonstrate responsible work ethics.

Program Outcomes

- A. Demonstrates an understanding of the services provided by the surgical team in relation to the patient's restoration of health.
- B. Maintain accountability for own actions to assure adherence to ethical and legal standards.
- C. Respects patient's inherent right to privacy, dignity, and confidentiality.
- D. Apply knowledge of normal and pathological anatomy and physiology.
- E. Perform preoperative, intra-operative and post-operative planning including individualized preparation for each assigned surgical intervention.
- F. Applies the principles of asepsis in order to inhibit infection.
- G. Works efficiently and safely in a professional manner, in all aspects of surgical care in regards to the surgical patient and themselves.
- H. Use sound judgment in instituting established procedures.
- I. Respond to emergencies in a calm manner.
- J. Communicates effectively using appropriate medical terminology in the pre-operative setting.
- K. Provide optimum patient care by utilizing teamwork in the clinical setting.
- L. Demonstrate initiative to expand knowledge of new surgical procedures and subjects relating to the OR and the patient.
- M. Describe various medications used in surgery.
- N. Understand and use the metric system when measuring medications in surgery.
- O. Anticipate the surgeon efficiently and according to the needs of the surgical procedure being performed.
- P. Arrange surgical instrumentation and all supplies needed for the surgical procedure.
- Q. Apply computer knowledge to the educational process and safe patient care practices
- R. Apply electrical knowledge and principles of physics and robotics to safe patient care practices in the OR.

Course #	Course Title	Credit Hours	Required
SUR105	Intro to Surgical Technology	4	Yes

SUR110	Microbiology	2	Yes
SUR125	Surgical Medical Terminology	3	Yes
SUR135	Principles and Practices of ST	5	Yes
SUR145	Principles and Practices of ST LAB	3	Yes
SUR155	Surgical Procedures I	4	Yes
SUR175	ST Clinical I	3	Yes
SUR250	Pharmacology	2	Yes
SUR245	Surgical Procedures II	5	Yes
SUR265	Surgical Procedures III	5	Yes
SUR270	ST Clinical II	4	Yes
SUR285	ST Clinical III	6	Yes
SUR295	ST Certification Review	1	Yes

Program Course Descriptions

SUR105 Intro to Surgical Technology (4 credits)

The course introduces the student to professional responsibilities, duties, and general functions of the operating room. It also introduces the student to the rest of the operating room team and their functions, responsibilities for safety of the patient and themselves, organization of the hospital and the operating room, legal and ethical issues, and the importance of communication in the operating room, credentialing, and professionalism. The use of electricity and lasers in the operating room are also covered as are the pre-op routines of the circulator prior to the patient entering the operating room.

SUR110 Microbiology (2 credits)

The course introduces the student to basic micro-organisms and how they relate to the operating room and sterile technique.

SUR120 Medical Terminology (3 credits)

The course introduces the student to the language of the medical field. Medical prefixes, suffixes, and combining forms are introduced to the student so they may have a thorough knowledge and understanding of what they are reading and writing in the medical field. An emphasis is placed on terms, pathological conditions, and diagnostic terms that relate to surgery.

SUR135 Principles and Practice of ST (5 credits)

The course introduces the student to basic care practices of the operating room and will include aseptic technique and surgical case management. It covers a multitude of duties and concepts of both the scrub and circulating roles of the operating room. This also includes scrubbing, gowning, and gloving; preparing and maintaining the sterile field for surgery; methods of sterilization; all operating room (OR) equipment and its use, sponge, sharp, and instrument counts; specialty instruments and their care; surgical dressings; catheters, tubes and drains; pre-op, intra-op, and post-op duties of the surgical tech and circulating nurse like positioning prepping and draping and more.

SUR145 Principles and Practice of ST LAB (3 credits)

The course allows the student to apply the knowledge that he/she learned in SUR140 (Principles and Practices). Repeated practice is designed to get the student ready for the clinical area to assure proper patient care. The student must pass the lab in order to continue in the program.

SUR155 Surgical Procedures I (4 credits)

The course instructs the student in the basic general, gynecological, and genitourinary surgical procedures. Besides the procedure itself the student will learn the instrumentation needed, pathology, sutures used, and special considerations.

SUR175 Surgical Tech Clinical I (3 credits)

The student will start to apply the basic skills they have learned for the operating room in the actual operating room of a clinical facility. They will also pick up experience in the instrument room and pre-operative area of the hospital. Clinical proficiency at our facilities prepares the student with a minimum of 120 cases, 80 of which are in the first scrub role and comprise a variety of surgical scrub experiences.

SUR250 Pharmacology (2 credits)

This course begins with weights and measurements using the metric system and its application in the medical field. A review of basic math skills and figuring ratios is included. Medications used in the operating room during surgery both for the surgeon and the anesthesia provider will be discussed. Pre-operative and post-operative medications for anxiety, pain, emergencies, and other operating room (OR) related health issues will be discussed. Anesthetic agents used including IV, inhalation, regional, and local will be presented to the student.

SUR245 Surgical Procedures II (5 credits)

Students will learn ENT, maxillofacial, orthopedic, vascular, plastic surgery, and neuro surgical procedures. Besides the procedure itself, included in this course is pathology involved, surgical instruments needed, positioning of the patient, and special considerations for each surgical procedure.

SUR265 Surgical Procedures III (5 credits)

The course will introduce students to vascular, thoracic, plastic, ophthalmic, pediatric surgical procedures and trauma surgery. Included in this is pathology involved, surgical instruments needed, positioning the patient, and special considerations for each surgical procedure. Students will also learn basic physics and robotics as applied to the operating room.

SUR270 ST Clinical II (4 credits)

In the surgical suite students will apply knowledge and skills learned in Surgical Procedures II and Principles and Practices Lab to the operating room on all surgical procedures. This course is designed to increase the student's self-confidence as a surgical tech and allow them to become more aware of their sterile technique and preparedness for each surgical procedure. Anticipation of the surgeon is critical. Clinical proficiency at our facilities prepares the student with the required 120 surgical cases, 80 of those in the 'first scrub' role.

SUR285 ST Clinical III (6 credits)

In the surgical suite students will apply knowledge and skills learned in Surgical Procedures and Principles and Practices to the operating room on more advanced procedures. This course is designed to increase the student's self-confidence and have them know instruments needed and general preparedness for each surgical procedure. Anticipatory skills are enhanced. Clinical proficiency at our facilities prepares the student with the required 120 surgical cases, 80 of these will be in the 'first scrub' role.

SUR295 ST Certification Review (1 credit)

Comprehensive review of surgical technology concepts and practical preparation for the national certification examination including but not limited to: a. Preoperative preparation of the surgical patient; b. Intra-operative procedures; c. Post-operative procedures; d. Administrative and personnel; e. Equipment sterilization and maintenance; f. Anatomy and physiology; g. Microbiology; and h. Surgical pharmacology .

ADA Notification Statement and Disability Services:

The Testing/ADA Coordinator office is responsible for assisting in arranging accommodations and for identifying resources at Washburn Tech for persons with disabilities. Qualified students with disabilities **MUST** register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin by contacting the Testing/ADA Coordinator's office as soon as a need may arise. Depending on the accommodation request, four to eight weeks lead time may be needed for timely and effective provision of services. Testing/ADA Coordinator coordinates and assists in arranging services it deems appropriate for eligible students on a case-by-case basis.

If you are a student with a disability that may substantially limit your ability to participate in this class and believe you will need accommodations, it is your responsibility to contact:

Special Support Services Coordinator

Phone: 785-228-6356

E-Mail: gloria.christian@washburn.edu

Washburn University [prohibits discrimination](#) on the basis of race, color, religion, age, national origin, ancestry, disability, sex, sexual orientation, gender identity, genetic information, veteran status, or marital or parental status. The following person has been designated to handle inquiries regarding the non-discrimination policies: Dr. Pamela Foster, Equal Opportunity Director/Title IX Coordinator, Washburn University, 1700 SW College Ave, Topeka, Kansas 66621, 785.670.1509, eodirector@washburn.edu

