

SURGICAL TECHNOLOGY (SUR)

SUR 100 - Orientation to the Profession (1 Credit)

1 lecture, 0 lab, 1 total contact hours

Introduces the student to the role of the surgical technologist and the professional practice of surgical technology. Emphasizes professionalism, organizations, credentialing and employability skills such as effective communication and teamwork. Students will investigate ethical, moral and legal issues, and hazard preparations, risk management and organizational relationships within the healthcare facility.

Typically offered: Fall, Spring

SUR 101 - Surgical Pharmacology (2 Credits)

2 lecture, 2 total contact hours

This course provides an in-depth exploration of pharmacological principles relevant to surgical technology, with a focus on intraoperative solutions, medications, and anesthesia. Students will examine drug classifications, mechanisms of action, and safe handling practices specific to the surgical environment. Emphasis is placed on the preparation, administration, and monitoring of medications used during surgical procedures, as well as the roles and responsibilities of the surgical technologist in supporting medication and anesthesia delivery. Terminology, abbreviations, dosage calculation, and weights and measures associated with medication administration are presented. This course equips students with the knowledge and skills necessary to ensure patient safety and effective surgical outcomes. Prerequisite: Admission into the Surgical Technology program.

Typically offered: Fall

SUR 102 - Fundamentals of Surgical Technology (4 Credits)

4 lecture, 4 total contact hours

Presents fundamental principles and skills necessary for the use of aseptic technique in surgical procedures. Emphasizes the role of the surgical technologist within all phases of surgical case management including scrubbing, assistant circulating duties, safety considerations and preparation for emergency situations. Examines the use instrumentation, supplies, equipment utilized for surgical procedures and equipment sterilization and maintenance. Reviews wound care and hemostasis within relation to surgical care and the surgical patient. Prerequisite: Entrance into the Surgical Technology Program.

Typically offered: Fall

SUR 103 - Fundamentals/Surgical Technology Laboratory (2 Credits)

4 lab, 4 total contact hours

Applies knowledge gained in didactic coursework within SUR 102 (Fundamentals of Surgical Technology.) Students will apply theoretical knowledge in the performance of tasks performed by surgical technologists in perioperative care. Emphasizes the surgical technologist's role and skills in all phases of surgical case management. Prerequisite: SUR 102 with grade of C or better.

Typically offered: Spring

SUR 104 - Surgical Procedures I (3 Credits)

3 lecture, 3 total contact hours

Examines specialized surgical procedures in relation to relevant anatomy, physiology, pathology, microbiology, supplies, equipment, and instrumentation needed for various surgical procedures. Reviews factors unique to surgical procedures including surgical hazards encountered, Content covers diagnostic testing, general, obstetric, and gynecological surgical procedures. Focuses on all phases of peri-operative care.

Prerequisite: SUR 102 with a grade of C or better.

Typically offered: Spring

SUR 105 - Clinical Applications I (2 Credits)

0 lecture, 6 lab, 6 total contact hours

Applies the principles and practice of basic surgical procedures during clinical rotations in affiliated hospitals. Introduces the students to the scrub role in the operating room as Observation role, Second Scrub and First Scrub. Beginner level study includes the application of basic skills learned in the laboratory setting with an emphasis on General, Obstetric, Gynecological and Genitourinary surgical procedures. Focuses on knowledge, skills and professionalism necessary for perioperative case management. Prerequisite: SUR 103, SUR 104, and SUR 106 with grades of C or better.

Typically offered: Summer

SUR 106 - Intermediate Surgical Procedures (3 Credits)

3 lecture, 0 lab, 3 total contact hours

Examines specialized surgical procedures in relation to relevant anatomy, physiology, pathology, microbiology, diagnostic testing, supplies, equipment, and instrumentation needed for various surgical procedures. Reviews factors unique to surgical procedures including surgical hazards encountered. Content covers minimally invasive, genitourinary, and orthopedic surgical procedures. Focuses on all phases of peri-operative care. Prerequisite: SUR 102 with a grade of C or better.

Typically offered: Spring

SUR 108 - Core Concepts in Sterile Processing and Distribution (4 Credits)

4 lecture, 0 lab, 4 total contact hours

This course provides a comprehensive introduction to the fundamental concepts and practices in sterile processing and distribution within healthcare facilities. Students will explore critical topics such as infection control, sterilization methods, decontamination processes, surgical instrumentation, equipment maintenance, and supply chain management. Emphasis is placed on industry standards, regulatory compliance, and best practices to ensure the safe and effective handling of medical equipment. Develops the foundational skills and knowledge required to excel in sterile processing and distribution roles. Aids students in preparation for industry certification, job search and post-graduate employment. Corequisite: SUR 109

SUR 109 - Core Concepts/Sterile Processing/Distribution Lab (2 Credits)

0 lecture, 4 lab, 4 total contact hours

Provides supervised lab training applying the primary responsibilities of a sterile processing technician. With an emphasis on surgical instrumentation identification, preparation, distribution and storage, surgical and hospital supplies and equipment; quality assurance; and inventory management. Teaches students how to minimize contagions and maintain healthy hospitals, while enforcing decontamination standards in a variety of clinical settings. Corequisite: SUR 108

SUR 110 - Fundamentals of Sterile Processing (3 Credits)*3 lecture, 3 total contact hours*

Introduces the primary responsibilities of a sterile processing technician. Emphasizes decontamination, disinfection, preparation, sterilization, storage and distribution of instruments, supplies and equipment, quality assurance and inventory management. Prerequisite: Entry into the Surgical Technology Program (Limited Enrollment)

Typically offered: Fall**SUR 111 - Fundamentals/Sterile Processing Laboratory (1 Credit)***0 lecture, 2 lab, 2 total contact hours*

Provides supervised lab training applying the primary responsibilities of a sterile processing technician. Emphasizes identification, preparation, distribution and storage of instruments, supplies and equipment; quality assurance, and inventory management. Teaches students how to minimize contagions and maintain healthy hospitals while enforcing decontamination standards in a variety of clinical settings. Prerequisite: Entry into the Surgical Technology Program (Limited Enrollment)

Typically offered: Fall**SUR 112 - Introduction to Microbiology for Sterile Processing Technicians (3 Credits)***3 lecture, 0 lab, 3 total contact hours*

Introduces basic microbiology for Sterile Processing Technicians, emphasizing aspects related to preparation of instruments and devices used in the surgical field. Studies the structure and properties of bacteria, fungi, viruses, and other microbes including historical microbiology, infectious process, infection control, and the role of the immune system in health and disease. Teaches students how to identify contagions and maintain healthy hospitals. A grade of "C" or above must be earned in courses to meet requirements for enrollment in subsequent courses.

SUR 113 - Clinical Application for Sterile Processing (3 Credits)*0 lecture, 9 lab, 9 total contact hours*

Applies the primary responsibilities of a sterile processing technician with supervised training in a clinical setting. Emphasizing preparation, distribution and storage of instruments, supplies and equipment; quality assurance; and inventory management. Students minimize contagions and maintain healthy hospitals, while enforcing decontamination standards in a variety of clinical settings. Prerequisite: SUR 108 and SUR 109 with grades of C or better OR SUR 110, SUR 111, and SUR 114 with grades of C or better.

Typically offered: Fall, Spring, Summer**SUR 114 - Surgical Tech Pathway to Sterile Processing Certificate (2 Credits)***2 lecture, 0 lab, 2 total contact hours*

This course bridges the curriculum between the Surgical Technology and Sterile Processing and Distribution programs. It provides Surgical Technology students with the knowledge and skills necessary to complete the Sterile Processing Certificate Program. Students will explore advanced sterile processing techniques and workflow integration within healthcare settings. Through hands-on practice and theoretical instruction, students will learn to manage sterile processing responsibilities, align with industry standards, and support patient safety across surgical and central sterile environments. Develops the foundational skills and knowledge required to excel in sterile processing and distribution roles. Aids students in preparation for industry certification, job search and post-graduate employment. Successful completion prepares students for clinical rotation, professional certification and equips them to excel in sterile processing roles. Prerequisite: SUR 110 and SUR 111 with a C or better.

SUR 201 - Surgical Procedures II (6 Credits)*6 lecture, 6 total contact hours*

Examines advanced surgical procedures in relation to the physiological aspects of surgical intervention including ophthalmic, ear, nose and throat; oral and maxillofacial, plastic and orthopedic procedures. Focuses on knowledge of the involved anatomy, existing pathology, surgical hazards encountered, and a review of perioperative patient care. Prerequisite: SUR 104 and SUR 105 with grades of C or better. Corequisite: SUR 202.

SUR 202 - Clinical Applications II (5 Credits)*0 lecture, 15 lab, 15 total contact hours*

Applies the principles and practice of basic to complex surgical procedures during clinical rotations in affiliated hospitals. Continues familiarizing the students to the scrub role in the operating room as Observation role, Second Scrub and First Scrub. Intermediate level study includes the application of skills learned in the laboratory setting and SUR 105 (Clinical Applications I) with an emphasis on Ophthalmic, Otorhinolaryngology; Oral and Maxillofacial; Plastic and Reconstructive; Orthopedic and Neuro surgical procedures. Focuses on knowledge, skills and professional ism necessary for perioperative case management. Prerequisite: SUR 104, SUR 105, and SUR 106 with grades of C or better.

Typically offered: Fall**SUR 203 - Surgical Procedures III (4 Credits)***4 lecture, 4 total contact hours*

Examines specialized surgical procedures related to peripheral vascular, thoracic, cardiac and neurosurgery. Includes knowledge of the involved anatomy, existing pathology, surgical hazards encountered, and a review of perioperative patient care. Prerequisite: SUR 201 and SUR 202 with grades of C or better. Corequisite: SUR 204.

SUR 204 - Clinical Applications III (6 Credits)*0 lecture, 29 lab, 29 total contact hours*

Applies the principles and practice of basic to major complex surgical procedures during clinical rotations in affiliated hospitals. Applies all knowledge learned while assisting the surgical team with the daily pre-, peri-, and post-operative duties of a surgical technologist. Students will progress through increasingly complex first and second scrubbing surgical procedures as they move toward entry-level surgical technologist abilities. Intermediate level study includes the application of skills learned in the laboratory setting SUR 105 (Clinical Applications I) and SUR 202 (Clinical Applications II) with an emphasis on Neuro, Peripheral Vascular and Cardiothoracic surgical procedures. Focuses on knowledge, skills and professional necessary for perioperative case management. Prerequisite: SUR 201 and SUR 202 with grades of C or better. Corequisite: SUR 203.

SUR 211 - Complex Surgical Procedures (3 Credits)*3 lecture, 0 lab, 3 total contact hours*

Examines specialized surgical procedures in relation to relevant anatomy, physiology, pathology, microbiology, diagnostic testing, supplies, equipment, and instrumentation needed for various surgical procedures. Reviews factors unique to surgical procedures including surgical hazards encountered, Content covers otorhinolaryngological, and plastic and reconstructive surgical procedures. Focuses on all phases of perioperative care. Prerequisite: SUR 104, SUR 105 and SUR 106 with grades of C or better.

Typically offered: Fall

SUR 213 - Surgical Procedures IV (3 Credits)

3 lecture, 0 lab, 3 total contact hours

Examines specialized surgical procedures in relation to relevant anatomy, physiology, pathology, microbiology, diagnostic testing, supplies, equipment, and instrumentation needed for various surgical procedures. Reviews factors unique to surgical procedures including surgical hazards encountered. Content covers ophthalmic, oral and maxillofacial, and neuro surgical procedures. Focuses on all phases of peri-operative care. Prerequisite: SUR 104, SUR 105, SUR 106 with a grade of C or better.

Typically offered: Fall

SUR 214 - Advanced Clinical Application (4 Credits)

0 lecture, 12 lab, 12 total contact hours

Applies the principles and practice of basic to major complex surgical procedures during clinical rotations in affiliated hospitals. Applies all knowledge learned while assisting the surgical team with the daily pre, peri and post-operative duties of a surgical technologist. Students will progress through increasingly complex first and second scrub roles in surgical procedures as they move toward entry-level surgical technologist abilities. Intermediate level study includes the application of skills learned in the laboratory setting, SUR 105 Clinical Applications I and SUR 202 Clinical Applications II with an emphasis on Peripheral Vascular, Cardiothoracic, Trauma and Gender Reassignment surgical procedures. Focuses on knowledge, skills and professionalism necessary for perioperative case management. Prerequisite: SUR 202, SUR 211, SUR 213 with grades of C or better.

Typically offered: Spring

SUR 215 - Surgical Procedures V (3 Credits)

3 lecture, 0 lab, 3 total contact hours

Examines specialized surgical procedures in relation to relevant anatomy, physiology, pathology, microbiology, diagnostic testing, supplies, equipment, and instrumentation needed for various surgical procedures. Reviews factors unique to surgical procedures including surgical hazards encountered. Content covers peripheral vascular, cardiovascular, thoracic, gender reassignment and trauma surgical procedures. Focuses on all phases of peri-operative care. Prerequisite: SUR 211 and SUR 213 with grades of C or better.

Typically offered: Spring

SUR 220 - Surgical Technology Professional Seminar (1 Credit)

1 lecture, 0 lab, 1 total contact hours

Continues to develop student's understanding of Surgical Technology scope of practice and professional code of ethics. Prepares students to sit for the National Board of Surgical Technology and Surgical Assisting (NBSTSA) certification exam. Aids students in preparation for job search and post-graduate employment. Prerequisite: SUR 211 and SUR 213 with a grade of C or better.

Typically offered: Spring