SUR Surgical Technology

SUR 100 Orientation to the Profession (1-0)

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.

SUR 101 Surgical Pharmacology (2-0) 2 crs.

Introduces basic concepts and skills in pharmacology and anesthesia related to surgical technology. Emphasis is given to classification, indications, interactions and adverse reactions of commonly used medications. Terminology, abbreviations, dosage calculation, and weights and measures associated with medication administration are presented. Students are also exposed to the principles of anesthesia administration and the biopsychosocial needs of the patient.

Prerequisite: Admission into the Surgical Technology program.

SUR 102 Fundamentals of Surgical Technology (4-0) 4 crs.

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: SUR 100, SUR 110, SUR 111 with grades of C or better.

SUR 103 Fundamentals of Surgical Technology Lab (0-4)

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 grades of C or better.

SUR 104 Surgical Procedures I (3-0)

3 crs.

2 crs.

1 cr.

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.

SUR 105 Clinical Applications I (0-6)

2 crs.

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.

SUR 106 Intermediate Surgical Procedures (3-0)

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.

SUR 110 Fundamentals of Sterile Processing (3-0) 3 crs. Introduces the primary responsibilities of a sterile processing technician. Emphasizes preparation, distribution and storage of instruments, supplies and equipment; quality assurance; and inventory management. Teaches students the basics of microbiology and how to minimize contagions in order to maintain healthy hospitals, while enforcing decontamination standards in a variety of clinical settings. Corequisite: SUR 111

SUR 111 Fundamentals/Sterile Processing Lab (0-2) 1 cr.

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:** SUR 110 with a C or better or concurrent enrollment.

SUR 112 Introduction to Microbiology for Sterile Processing Technicians (3-0) 3 crs.

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 (0-9) 3 crs.

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.

SUR 201 Surgical Procedures II (6-0)

6 crs.

3 crs.

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 (0-15)

5 crs.

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 professionalism necessary for perioperative case management.

Prerequisite: SUR 104, SUR 105 and SUR 106 with grades of C or better.

SUR 203 Surgical Procedures III (4-0)

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 (0-29)

6 crs.

4 crs.

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 professionalism 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 (3-0) 3 crs. 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 peri-operative care. **Prerequisite:** SUR 104, SUR 105 and SUR 106 with grades of C or better.

SUR 213 Surgical Procedures IV (3-0) 3 crs. 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.

SUR 214 Advanced Clinical Applications (0-12)

4 crs.

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

SUR 215 Surgical Procedures V (3-0) 3 crs.

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.

SUR 220 Surgical Technology Professional Seminar (1-0) 1 cr. 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.