

# SURGICAL TECHNOLOGY (SUR)

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## **SUR 100 (12 credit hours)**

### **Surgical Technology Fundamentals Theory**

Provides an overview of the history of surgery and the role of the surgical technologists, including professional responsibilities, developing a professional resume, legal and ethical considerations, interpersonal relationships and communication skills. Incorporates safety, hazards preparation, aseptic technique and duties of the scrubbed and the circulating surgical technologist during a surgical procedure. Provides information for the performance and completion of surgical procedures including general surgery, ob/gyn with attendant specialty equipment, abdominal incisions, wound closures, and standard precaution skills. Lecture: 12 credits (180 contact hours).

**Pre-requisite:** Minimum "C" grade in [BIO 135 or (BIO 137 and BIO 139)] and (AHS 115 or CLA 131 or MIT 103) and (BIO 225 or BIO 226 or BIO 227 or BIO 118).

**Co-requisite:** SUR 102 and SUR 125.

**Pre- or co-requisite:** SUR 130, CPR (for Healthcare Providers) must be completed prior to the first surgical technology skills practicum course and must remain current throughout the Surgical Technology Program.

**Attributes:** Technical

**Components:** LEC: Lecture

## **SUR 102 (3 credit hours)**

### **Surgical Technology Fundamentals Lab**

Provides opportunity for demonstration of skills required to prepare the patient, operating room, basic equipment, and supplies; and to function as a member of an operating room team. Incorporates OSHA safety standards, aseptic technique, and duties of both scrubbed and circulating technologist during a surgical procedure. CPR (for Healthcare Providers) must be completed prior to the first surgical technology skill practicum course and must remain current throughout the Surgical Technology Program. Laboratory: 3 credits (135 contact hours).

**Pre-requisite:** Minimum "C" grade in [BIO 135 or (BIO 137 and BIO 139)] and (AHS 115 or CLA 131 or MIT 103) and (BIO 118 or BIO 225 or BIO 226 or BIO 227).

**Pre- or co-requisite:** SUR 100 of (SUR 109 and SUR 110).

**Attributes:** Technical

**Components:** LAB: Laboratory

## **SUR 109 (3 credit hours)**

### **Introduction to Surgical Technology**

Provides a brief overview of the history of surgery and an in-depth introduction of the role and responsibilities of the surgical technologists, an integral health care professional in the delivery of perioperative patient care and surgical services; including professional responsibilities, developing a professional resume, legal and ethical considerations, interpersonal relationships and communication skills. Introduces the basics of biomedical science and identifying information resources. Introduces all-hazards preparation for the surgical technologist, basic principles of aseptic technique, sterilization, surgical scrub, gown and gloving and basic instruments used in surgery along with correlating the impact of microbiology in relationship to the practice of sterile technique and infection control in the operative setting. Lecture: 3 credits (45 contact hours).

**Components:** LEC: Lecture

## **SUR 110 (9 credit hours)**

### **Surgical Technology Fundamentals**

Incorporates safety, aseptic technique and duties of the scrubbed and the circulating surgical technologist during a surgical procedure; Provides in depth information for the successful preparation, performance, and completion of basic surgical procedures; Addresses specialty areas of general surgery, ob/gyn with attendant specialty equipment; Introduces the theory of abdominal incisions, wound closures, and standard precaution skills in each clinical assignment; Includes biomedical sciences of electricity, physics, and robotics as they pertain to surgical technology. Lecture: 9 credits (135 contact hours).

**Pre-requisite:** Admission to Surgical Technology program or consent of Program Coordinator and SUR 109 and AHS 115.

**Co-requisite:** SUR 102 and SUR 125.

**Pre- or co-requisite:** CPR (for Healthcare Providers) must be completed prior to the first surgical technology skills practicum course and must remain current throughout the Surgical Technology Program.

**Attributes:** Technical

**Components:** LEC: Lecture

## **SUR 117 (3 credit hours)**

### **Pathophysiology for Surgical Technologist**

Provides instruction in the human disease processes as related to origin, diagnosis, treatment and/or surgical intervention, including adaptation and injury processes, as well as the role of microorganisms in the human body. Examines major body systems and disease mechanisms, as well as care and disease prevention methods. OSHA criteria for bloodborne pathogens and infectious diseases are discussed. Lecture: 3 credits (45 contact hours).

**Pre-requisite:** Admission into the Surgical Technology Program and minimum "C" grade in [BIO 135 or (BIO 137 and BIO 139)] and (AHS 115 or CLA 131 or MIT 103).

**Pre- or co-requisite:** SUR 100 or (SUR 109 and SUR 110).

**Attributes:** Technical

**Components:** LEC: Lecture

## **SUR 125 (2-3 credit hours)**

### **Surgical Technology Skills Practicum I**

Provides experience in a healthcare setting performing the duties of a scrubbed and/or circulating technologist during an assigned surgical procedure with an emphasis on OSHA standards. CPR (for Healthcare Providers) must be completed prior to the first surgical technology skills practicum course and must remain current throughout the Surgical Technology Program. Clinical: 2.0 - 3.0 credits (120 - 180 contact hours).

**Pre-requisite:** Minimum "C" grade in SUR 102.

**Co-requisite:** SUR 100 or (SUR 109 and 110).

**Attributes:** Technical

**Components:** CLN: Clinical

## **SUR 201 (6-7 credit hours)**

### **Surgical Technology Skills Practicum II**

Provides opportunity for application of techniques learned in SUR 202 in a healthcare setting performing the duties of a scrubbed and/or circulating technologist during an assigned surgical procedure with an emphasis on OSHA standards. Clinical: 6.0 - 7.0 credits (360-420 contact hours).

**Pre-requisite:** Minimum grade of "C" in [SUR 100 or (SUR 109 and 110)] and SUR 125 and SUR 130.

**Co-requisite:** SUR 202.

**Attributes:** Course Also Offered in Modules, Technical

**Components:** CLN: Clinical

**SUR 202 (11 credit hours)**

**Surgical Technology Advanced Theory**

Focuses on the relevant anatomy, indications for surgery, patient preparation, special equipment and supplies, purpose, expected outcomes, and possible complications of specialty areas following OSHA standards. Introduces the fundamental principles of the clinical use of drugs. Emphasizes the role and responsibility of the surgical technologist related to drugs, a review of basic mathematic skills, a thorough knowledge of the systems of measurement, and conversion and application of skills to perform dosage calculations. Presents information related to medicines in common use in the surgical setting. Lecture: 11 credits (165 contact hours).

**Pre-requisite:** Minimum "C" grade in [SUR 200 or SUR 109 and SUR 110] and SUR 125.

**Co-requisite:** SUR 201.

**Attributes:** Technical

**Components:** LEC: Lecture

**SUR 275 (2 credit hours)**

**Surgical Technology Advanced Practicum**

Provides an advanced experience in a healthcare setting performing the duties of a scrubbed and/or circulating technologist during an assigned surgical procedure with limited supervision. Practicum: 2 credits (120 contact hours).

**Pre- or co-requisite:** Minimum grade of "C" in SUR 202 and SUR 201.

**Attributes:** Technical

**Components:** PCM: Practicum

**SUR 280 (5 credit hours)**

**Surgical Anatomy**

Designed to provide accurate information about the structure and function of the human body. Based on regional anatomy with surgical anatomy as the critical component. Introduces chemistry, cells, tissue (different types and functions) and various body systems. Relates anatomy to surgical techniques and an understanding of the disease processes, fluids, shock and the relationship of the processes to the specific types of pathologies according to body systems. Correlates surgical anatomy to surgery of the various body systems. Compares and contrasts normal anatomy to the pathophysiology as it relates to surgical procedures and evaluates diagnostic images as related to surgical anatomy. Lecture: 5 credits (75 contact hours).

**Pre-requisite:** Surgical Technologist or CNOR.

**Co-requisite:** SUR 288 & SUR 295.

**Attributes:** Technical

**Components:** LEC: Lecture

**SUR 282 (3 credit hours)**

**Perioperative Bioscience**

Promotes an understanding of microbial physiology which precedes the understanding of disease transmission and/or prevention; Emphasizes standard precautions and infection control; Contains pharmacology section designed to promote understanding of effects of pre, post and operative drugs; Includes anesthesia section designed to promote understanding of general principles/techniques and drugs used by anesthesia and effects on the patient; Introduces the student to the following: diagnostic testing such as radiology, laboratory, cardiographics, wound healing, nutrition perioperatively, fluid and electrolyte balance, and techniques in maintaining homeostasis. Lecture: 3 credits (45 contact hours).

**Pre-requisite:** Program admission and student must be a certified Surgical Technologist or an RN with operating room experience; Student must provide current documentation of certification; SUR 280, SUR 288, and SUR 295.

**Co-requisite:** SUR 294.

**Attributes:** Technical

**Components:** LEC: Lecture

**SUR 284 (3 credit hours)**

**Principles of Surgical Assisting**

Introduces the student to the theory involved in surgical assisting; Incorporates anatomy, surgical techniques, aseptic techniques, draping, positioning, suturing, safety, and duties of the surgical team. Student must be a certified Surgical Technologist or an RN with operating room experience OR consent. Lecture: 2 credits (30 contact hours). Laboratory: 1 credit (45 contact hours).

**Pre-requisite:** Program admission.

**Co-requisite:** SUR 280 & SUR 295.

**Attributes:** Technical

**Components:** LAB: Laboratory, LEC: Lecture

**SUR 286 (5 credit hours)**

**Surgical Anatomy II**

Designed to provide accurate information about the structure and function of the human body. Based on regional anatomy with surgical anatomy as the critical component. Introduces chemistry, cells, tissue (different types and functions) and various body systems to the student. Relates anatomy to surgical techniques and an understanding of the disease processes, fluids, shock and the relationship of the processes to the specific types of pathologies according to body systems. Correlates surgical anatomy to surgery of the various body systems. Compares and contrasts normal anatomy to the pathophysiology as it relates to surgical procedures and evaluates diagnostic images as related to surgical anatomy. Lecture: 5 credits (75 contact hours).

**Pre-requisite:** SUR 280, SUR 288, and SUR 295.

**Co-requisite:** SUR 294 and SUR 282.

**Attributes:** Technical

**Components:** LEC: Lecture

**SUR 288 (6 credit hours)****Principles of Surgical Assisting**

Designed to introduce the student to the theory involved in surgical assisting. Incorporates anatomy, surgical techniques, aseptic techniques, surgical infections, positioning, suturing, safety, electricity, robotics, minimally invasive surgical equipment, pharmacology/anesthesia principles, hematological principles and the perioperative/intraoperative/postoperative role of the surgical assistant. Student must be a certified Surgical Technologist or an RN with operating room experience or consent of instructor. Lecture: 4 credits (60 contact hours). Laboratory: 2 credits (90 contact hours).

**Pre-requisite:** Program admission.

**Co-requisite:** SUR 280 and SUR 295.

**Attributes:** Technical

**Components:** LAB: Laboratory, LEC: Lecture

**SUR 294 (4 credit hours)****Surgical First Assistant Practicum**

Involves advanced training in the preoperative, operative, and postoperative phases of surgery. Exposes student to a wide variety of surgical procedures. Emphasizes surgical anatomy, along with critical thinking skills, in every surgical procedure under the supervision of a surgeon who is responsible for overseeing the clinical educational experience of the student. Practicum: 4 credits (360 contact hours).

**Pre-requisite:** SUR 280, SUR 288, and SUR 295.

**Co-requisite:** SUR 282 and SUR 286.

**Attributes:** Technical

**Components:** PCM: Practicum

**SUR 295 (1 credit hours)****Surgical First Assistant Clinical**

Includes the performance of entry level duties of a surgical assistant in a clinical setting under the supervision of a qualified preceptor. Follows the Commission on Accreditation of Allied Health programs Surgical Assistant Core Curriculum related to the nature of the cases and the duties involved. Clinical: 1 credit hour (45 contact hours).

**Pre-requisite:** Program admission.

**Co-requisite:** SUR 280 and SUR 288.

**Attributes:** Technical

**Components:** CLN: Clinical

**SUR 296 (3 credit hours)****Surgical First Assistant Practicum**

Involves advanced training in the preoperative, operative, and postoperative phases of surgery. Exposes student to wide variety of surgical procedures. Emphasizes surgical anatomy, along with critical thinking skills, in every surgical procedure under the supervision of a surgeon who is responsible for overseeing the clinical educational experience of the student. Practicum: 3.0 credits (270 contact hours).

**Pre-requisite:** SUR 280, SUR 284 and SUR 295.

**Co-requisite:** SUR 282.

**Attributes:** Technical

**Components:** PCM: Practicum

**SUR 297 (1 credit hours)****Surgical First Assistant Practicum II**

Involves advanced training in the preoperative, operative, and postoperative phases of surgery. Exposes student to wide variety of surgical procedures. Emphasis on advanced anatomical knowledge that is applied towards the surgical diagnosis, along with critical thinking skills, in every surgical procedure under the supervision of a surgeon who is responsible for overseeing the clinical educational experience of the student. Practicum: 1 credit (90 contact hours)

**Pre-requisite:** SUR 280, SUR 282, SUR 286, SUR 288, SUR 294, and SUR 295.

**Attributes:** Technical

**Components:** PCM: Practicum

**SUR 2011 (2 credit hours)****Surgical Skills I**

Provides opportunity for application of techniques in a healthcare setting performing the duties of a scrubbed and/or circulating technologist during an assigned surgical procedure with an emphasis on OSHA standards. Includes otorhinolaryngologic, plastic and reconstructive, and oral and maxillofacial procedures. Practicum: 2 credits (120 contact hours).

**Components:** PCM: Practicum

**SUR 2012 (4-5 credit hours)****Surgical Skills II**

Provides opportunity for application of techniques in a healthcare setting performing the duties of a scrubbed and/or circulating technologist during an assigned surgical procedure with an emphasis on OSHA standards. Includes genitourinary, orthopedic, neurosurgery, cardiovascular, peripheral vascular, and ophthalmic surgical procedures. Practicum: 4-5 credits (240-300 contact hours)

**Pre-requisite:** SUR 2011.

**Co-requisite:** SUR 200.

**Components:** PCM: Practicum