

# Surgical Technology (SURG)

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## **SURG 1000. Introduction to Surgical Technology. 2 Hours.**

First semester course. Students will be introduced to the profession of surgical technology. Students will acquire knowledge of professional requirements and expectations, scope of practice, the surgical team, hospital and health delivery systems, the physical environment of surgery, hazards and safety practices, ethical and legal aspects, risk management, credentialing, and professional organizations. Students will gain an understanding of various roles for surgical technologists, and specific tasks required to deliver surgical patient care before, during, and after a surgical procedure. Taught in cohort rotation. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Explain aspects of professionalism as it applies to surgical technology including job duties, expected traits, credentialing, continuing education, employment, and related professional organizations. 2. Identify ethical, moral and legal concepts and responsibilities expected of a professional surgical technologist. 3. Describe aspects of surgical patient care including patient needs, the physical environment, hazards and safety, and perioperative case management. Prerequisite: Acceptance into the Surgical Technology program. FA.

## **SURG 1021. Surgical Sciences. 3 Hours.**

First semester course. Foundational concepts of surgical microbiology and pathophysiology are introduced. Emphasis is placed on surgical applications of microbiology and pathophysiology including surgical infection control, diagnosis of diseases and disorders of human body systems, and identification of surgical interventions for specified pathophysiologic conditions. Students apply basic medical terminology to develop fluency in surgical terminology. Taught in cohort rotation. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Communicate effectively and fluently utilizing surgical terminology. 2. Explain principles of microbiology relating to surgical infection control and surgical practice. 3. Identify diagnostic tests and surgical interventions for pathophysiologic conditions of human body systems. 4. Access and evaluate resources to obtain current information on surgical microbiology, and surgical diagnosis and treatment of pathophysiologic conditions of human body systems. Prerequisite: Acceptance into the Surgical Technology program. FA.

## **SURG 1050. Surgical Technology Theory. 3 Hours.**

First semester course. Introduction to fundamentals of the surgical environment, including principles and applications of sterile technique, sterilization principles and practices, safety practices in the OR, handling and safety of specialized equipment, and introduction to surgical case management. Taught in cohort rotation. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Explain principles and applications of sterile technique. 2. Identify methods and parameters for sterilization of surgical items. 3. Discuss use and safety for surgical supplies, instruments and equipment. 4. Explain aspects of surgical case management including definitions, indications, anatomy, and procedure sequence for selected surgical interventions. Prerequisite: Acceptance into the Surgical Technology program. FA.

## **SURG 1055. Surgical Technology Lab I. 2 Hours.**

First semester course. Students learn, practice, and demonstrate entry-level surgical technology skills such as scrubbing, gowning, and gloving, aseptic technique, instrument identification, preparation of the sterile field, safe sharps handling, procedure steps anticipation, and professional behaviors. Taught in cohort rotation. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Satisfactorily perform the roles and functions of the ST at the introductory level. 2. Demonstrate sterile techniques and sterile conscience necessary to prevent surgical site infections. 3. Identify and safely handle surgical instruments and supplies. 4. Demonstrate professional behaviors expected of surgical technologists. Course fee required. Prerequisite: Acceptance into the Surgical Technology program. FA.

## **SURG 1060. Surgical Technology Clinical I (ALPP). 4 Hours.**

First semester course. Students correlate theory to practice in an actual surgical setting. Students apply previously learned foundational information and hands on skills as they perform in the first scrub role in assigned surgical procedures under the supervision of clinical site preceptors. An emphasis is placed on developing competence in basic surgical procedures in various surgical specialties. Taught in cohort rotation. This course is designated as an Active Learning Professional Practice (ALPP) course. This course allows students to explore and apply content learned in the course in a professional experience away from the classroom. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Demonstrate employment level surgical technology skills in the scrub role for surgical procedures as assigned at the clinical site with an emphasis on increasingly more complicated procedures. 2. Effectively and safely manipulate surgical equipment, instruments, and supplies. 3. Consistently maintain aseptic technique, demonstrating the application of a strong sterile conscience. 4. Correlate foundational information with safe clinical practice. 5. Demonstrate increasingly higher order analysis, problem solving and critical thinking skills in surgical technology practice. 6. Demonstrate appropriate and effective communication skills. 7. Collaborate with other members of the operating room team in providing safe surgical patient care. 8. Practice the legal, ethical and professional responsibilities of the surgical technologist. 9. Demonstrate the ability to maintain a stable emotional state, even under stressful conditions, which will enable the effective use of reason and good judgment in patient care situations. Prerequisite: Acceptance into the Surgical Technology program. FA.

**SURG 2010. Surgical Pharmacology. 2 Hours.**

First semester course. Students gain information necessary for safe medication practice in surgery. Students attain competence in the metric system, medication calculations, fundamental concepts of pharmacology, medication identification and handling, medications used in surgery and at the surgical site, and aspects of anesthesia. Taught in cohort rotation. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Calculate metric equivalents for surgical and medication applications. 2. Utilize medication resources to obtain current information on surgical medications. 3. Organize medication information using a framework of basic pharmacology principles. 4. Discuss aspects of safe medication administration. 5. Apply principles of pharmacology including agents, categories, and purposes to medications used in surgery. 6. Describe preoperative, intraoperative, and emergency anesthesia concepts. Prerequisite: Acceptance into the Surgical Technology program. FA.

**SURG 2050. Surgical Procedures. 7 Hours.**

Second semester course. Student identify anatomy, physiology, pathophysiology, diagnostic tests, medications, equipment, instruments, supplies, procedural steps, and postoperative patient care concepts for surgical procedures in all major surgical specialties. Taught in cohort rotation. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Correlate medical terminology, surgical anatomy, physiology, pathophysiology, diagnostic interventions, special considerations, medications, supplies, equipment, and instrumentation to designated surgical procedures. 2. Summarize the sequence of steps conducted during designated surgical procedures. 3. Explain surgical wound classification, prognosis, and postoperative care of the patient for designated surgical procedures. Course fee required. Prerequisite: Acceptance into the Surgical Technology program. SP.

**SURG 2055. Surgical Technology Lab II. 1 Hour.**

Second semester course. Students learn, practice, and demonstrate intermediate level surgical technology skills with an emphasis on anticipation skills, surgical specialty instrumentation, and professional behaviors. Students also develop critical thinking competence in aseptic practice by identifying, analyzing, and correcting errors in sterile technique. Taught in cohort rotation. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Satisfactorily perform the roles and functions of the ST at employment entry-level. 2. Demonstrate sterile techniques and sterile conscience necessary to prevent surgical site infections. 3. Identify and safely handle specialty surgical instruments and supplies. 4. Demonstrate professional behaviors expected of surgical technologists. Course fee required. Prerequisite: Acceptance into the Surgical Technology program. SP.

**SURG 2060. Surgical Technology Clinical II (ALPP). 7 Hours.**

Second semester course. Students correlate theory to practice in an actual surgical setting. Students apply previously learned foundational information and skills as they perform in the first scrub role in assigned surgical procedures under the supervision of clinical preceptors. An emphasis is placed on developing competence in more complex surgical procedures in various surgical specialties. Taught in cohort rotation. This course is designated as an Active Learning Professional Practice (ALPP) course. This course allows students to explore and apply content learned in the course in a professional experience away from the classroom. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Demonstrate employment level surgical technology skills in the scrub role for surgical procedures as assigned at the clinical site with an emphasis on increasingly more complicated procedures. 2. Effectively and safely manipulate surgical equipment, instruments, and supplies. 3. Consistently maintain aseptic technique, demonstrating the application of a strong sterile conscience. 4. Correlate foundational information with safe clinical practice. 5. Demonstrate increasingly higher order analysis, problem solving and critical thinking skills in surgical technology practice. 6. Demonstrate appropriate and effective communication skills. 7. Collaborate with other members of the operating room team in providing surgical patient care. 8. Practice the legal, ethical and professional responsibilities of the surgical technologist. 9. Demonstrate the ability to maintain a stable emotional state, even under stressful conditions, which will enable the effective use of reason and good judgment in patient care situations. Prerequisite: Acceptance into the Surgical Technology program. SP.

**SURG 2070. Surgical Synthesis. 1 Hour.**

Second semester course. Students analyze the clinical experience by maintaining accurate documentation of case experiences and presenting case studies. Students correlate clinical experiences to surgical technology theory to prepare for the National Board Certification Examination. Taught in cohort rotation. This course requires a Differential Tuition Rate which is an additional fee of \$105 charged per credit hour. **\*\*COURSE LEARNING OUTCOMES (CLOs)** At the successful conclusion of this course, students will be able to: 1. Correlate theory and clinical surgical experiences. 2. Analyze surgical experiences to increase competence. 3. Prepare for certification examination and employment. Prerequisite: Acceptance into the Surgical Technology program. SP.