

# Surgical Technology

## **ST 101 INTRODUCTION TO SURGICAL TECHNOLOGY W/ LAB**

Credit Hours: 2

Prerequisites: Enrollment in ST Program.

This course introduces the student to the broad field of surgical technology. General information including the historical development of surgery, functions of hospitals and accrediting agencies will be addressed. Students will become familiar with basic principles of aseptic technique and surgical conscience as it relates to best practices and patient outcomes. Fundamental patient care skills including patient transport and positioning are taught and assessed in the laboratory. Professional expectations, standards, and behaviors of the perioperative team members will be introduced during this course. The student will be required to complete a course in cardiopulmonary resuscitation (BCLS).

## **ST 102 AP INTRODUCTION TO SURGICAL TECHNOLOGY**

Credit Hours: 2

Prerequisites: Enrollment in ST Program.

This course introduces the student to the broad field of surgical technology. General information including the historical development of surgery, functions of hospitals and accrediting agencies will be addressed. Students will become familiar with basic principles of aseptic technique and surgical conscience as it relates to best practices and patient outcomes. Fundamental patient care skills including patient transport and positioning are taught and assessed in the laboratory. Professional expectations, standards, and behaviors of the perioperative team members will be introduced during this course. The student will be required to complete a course in cardiopulmonary resuscitation (BCLS).

## **ST 120 SURGICAL TECHNOLOGY I W/ LAB**

Credit Hours: 6

Prerequisites: ST 101, ST 102, SC 225

This course introduces the student to the practice of surgical technology. The preoperative roles of the surgical technologist in the circulator and first scrub role will be thoroughly examined. Preoperative patient diagnostic procedures, principles of sterilization, skin preparation and draping of surgical patient is included. Surgical and aseptic technique during the preoperative and intraoperative phases of the operative procedure is included in this course. Students will gain knowledge of suture and surgical instrumentation utilized during the intraoperative process and will perform basic general case preparation with understanding of patient disease process, procedural steps, and technique necessary for optimal patient outcomes. Students will research,

formulate, and present individual and group projects to enhance learning of course material. Student will be introduced to the physical principles of mechanics, heat, sound, electricity, magnetism, and light as they apply to the operation of laser, robotic, and electrical surgical equipment. The laboratory setting will be used to reinforce material taught didactically. Students will be asked to engage in personal reflection and peer review of laboratory skills. Student must successfully complete performance competency in this course.

## **ST 200 PHARMACOLOGY FOR THE SURGICAL TECHNOLOGIST**

Credit Hours: 2

Prerequisites: Math Concepts- competency, ST 120

A study of medications used in the operating room with an emphasis on the common drugs used in the surgical area is completed in this course. Examination of the administration, actions, interactions, side effects, and terminology of perioperative medications is included. Legal responsibilities of the surgical technologist, common calculations, and safety measures performed in a sterile field to assure patient safety are practiced. Students will actively participate in group presentations enhancing didactic teaching and complete medication cards and two written reports during this course.

## **ST 205 MICROBIOLOGY FOR THE SURGICAL TECHNOLOGIST**

Credit Hours: 2

This course introduces the students to the historical background of microbiology, microbial structure and metabolism, and the relationship between humans and microorganisms. It includes disease production, transmission of disease-causing organisms, epidemiology, and immune defense mechanism. Principles of sanitation, disinfection, sterilization and wound healing are emphasized. Students learn techniques of standard precautions, specimen collection, preparation of cultures, and microscopic slide preparations with gram stain. An understanding of the medical impact of microorganisms on each body system and the environment is also addressed.

## **ST 210 SURGICAL TECHNOLOGY II/ W LAB**

Credit Hours: 4

Prerequisites: ST 120

This course will expand on the role of the surgical technologist in the scrub role. Case and room preparation, aseptic technique, counts, suture and procedural steps for a wide variety of cases are introduced in this course. Students will complete individual and group presentations to enhance classroom learning. A hospital based lab practicum and observation will be included in this course. The laboratory setting is used to enhance and reinforce

material taught didactically. Students will participate in active peer review of laboratory performance. Student must successfully complete clinical performance competency in this course.

### **ST 220            SURGICAL TECHNOLOGY III**

Credit Hours: 2

Prerequisites: ST 210

This course will include intraoperative considerations for surgical interventions on specialty patient populations and advanced surgical procedures. Students will participate in individual and group presentations to enhance learning in this course. Specialty instrumentation, equipment and supplies needed for specialty populations will be reviewed. The course will also emphasize the elements of professional development including professional organizations, leadership, teamwork, certification and continuing education. Students will discuss the role of the AST and its impact upon careers in surgical technology. Students will complete the Program Assessment Exam (PAE) during this course.

### **ST 250            CLINICAL I**

Credit Hours: 6

Prerequisites: ST 210, ST 200

Co requisite: ST 265

This course is designed to apply basic surgical anatomy, instrumentation and procedural steps combined with a consistent method of reinforcement in the clinical site. The students are assigned to a clinical site where they will apply theoretical knowledge while gaining aptitude, skills and proficiency necessary to function in non-complex situations as a surgical technologist.

### **ST 260            MEDICAL ETHICS AND LAW**

Credit Hours: 1

This course provides an overview of the laws and ethics the student should know to help give competent, compassionate care to patients that is also within acceptable legal and ethical boundaries. This course will also give students the tools and guidance to facilitate the resolution of the many legal and ethical questions that they may reasonably expect to face as a student, and later as a health care practitioner. Emphasis on professional liability, scope of practice, ethical and personal obligations in relationship to medical mistakes and surgical patient outcomes is included. Students will also utilize a wide variety of real-life experiences and legal cases related to the text material.

### **ST 265            CORRELATED PATIENT STUDY I**

Credit Hours: 1

Co requisite: ST 220, ST 250

This course will include the study of current trends, professional and interpersonal skills in the health care setting, and case review. Concurrent review of clinical

rotation and participation in the surgical team will occur during this course. Students will also be introduced to fundamental principles of evidence-based practice. Students will participate in journal review and present articles pertaining to their current clinical practice to classroom peers. Students will also prepare a paper for publication consideration on a relevant clinical topic. All assigned clinical paperwork will be reviewed during this course.

### **ST 268            CORRELATED PATIENT STUDY II**

Credit Hours: 1

Co-requisite: ST 270

Concurrent review of clinical rotation and participation in the surgical team through case studies and completion of clinical paperwork requirements will occur during this course. The student will develop the reflective practitioner model with direct applications to the experience of the surgical technologist in the workforce. Students will create a power point presentation on a surgical case study following course guidelines, and present study to peers in classroom setting. Students will prepare journal article on surgical case or surgical concept for dissemination and discussion.

### **ST 270            CLINICAL II**

Credit Hours: 6

Prerequisites: ST 250

Co-requisite: ST 268

The surgical technology student will continue to build on the concepts gained in ST 250 during this course. Surgical anatomy, instrumentation, and procedural steps for each case are reinforced. The student will function as a part of the surgical team in an operating room setting applying theoretical knowledge while gaining the aptitude, skills and proficiency necessary to function in complex situations and cases.

### **ST 280            ST SEMINAR**

Credit Hours: 2

Prerequisites: must be taken in the final semester of the ST Program

This course is designed to give specialized instruction in various areas of surgical technology. Employability skills will be reviewed and applied. Students will be introduced to techniques and exercises in preparation for the national CST exam. Written and oral presentations by the students are key elements of this course. All students meeting eligibility requirements will be required to seat the national Certification Exam administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA) within 30 days of graduation date. Successful completion of exam and proof of graduation allows graduate to use credential Certified Surgical Technologist (CST).