

# **ASSOCIATE OF OCCUPATIONAL SCIENCE** IN

SURGICAL TECHNOLOGY - COURSE SUMMARY (S.O.C. 29-2055.00, 31-9093.00) 1535 CLOCK HOURS 61 TOTAL WEEKS TO COMPLETE CREDIT UNITS 71 TOTAL WEEKS ON-TIME COMPLETION 67.5 SEMESTER CREDIT UNITS



# **SINCE 1991**

12901 Ramona Blvd Irwindale, CA 91706 Tel: (626)814-2080 www.premierecollege.edu

#### **EDUCATIONAL OBJECTIVES:**

- 1. The goal of the Surgical Technician program is the preparation of competent entry-level surgical technologists in the cognitive, psycho-motor and affective learning domains needed to assist with surgical patient care, which will enable our graduates to gain employment and serve our community
- 2. The program achieves the primary educational objectives and meet or exceed requirements set forth by the CAAHEP standards through educational activities like lectures, discussions and lab sessions, use of visual aids, personal experiences of the faculty, development of practical skills simulating the Operating Room and application of the knowledge and skills to their training on real time situations in the Surgical Environment at affiliated clinical facilities. The syllabi are such that they allow both depth and scope and adequate time to fully cover each subject. Objectives are reviewed regularly and consistently to make certain they are met
- Upon program completion, the graduate will be able to:
- Correlate the knowledge of anatomy, physiology, pathophysiology, and microbiology to their role as a Surgical Technologist.
- Demonstrate a safe and professional level of practice and knowledge in their role as a Surgical Technologist.
- Acquire an understanding of the ethical, legal, moral, and medical values related to the patient and the surgical team during the perioperative experience.
   Correlate the elements, action, and use of medications and anesthetic agents used during the perioperative experience.
- Implement safe practice techniques with regards to perioperative routines, patient transportation, positioning, and emergency procedures.
- Integrate principles of surgical asepsis as part of the perioperative experience.
- Accurately apply knowledge and skills of a professional Surgical Technologist to address the biopsychosocial needs of the surgical patient.
- Perform proficiently and competently as an entry level surgical technologist in the cognitive, psychomotor, and affective learning domains.
- Value the professional attributes of the Surgical Technologist

#### **PROGRAM DESCRIPTION:**

Classroom education, laboratory skill training, as well as, supervised clinical experience is included in the program. Instruction begins with study skills and strategies for college success. The curriculum contains four main areas or phases namely: General Education, Science, Core Concepts (Fundamentals), Basic Surgical Procedures, and Clinical Procedures (Practice).

The General Education includes English Communication, Business Math and General Psychology.

The science component includes basic science, related science, and biomedical science. It covers more focused topics such as medical terminology, anatomy and physiology, pathophysiology, microbiology, immunology, pharmacology, anesthesia concepts, physics, electricity, robotics, and computers.

The Core Concepts (Fundamentals) include elements, integration, and application. Procedural content (basic, intermediate, and advanced procedures) are the focus of integration, while clinical practice guidelines and case level requirements are taught in the application. Some of the specific topics included are aseptic techniques, sterilization and disinfection, environmental controls and personnel practices, funda-

#### **PROGRAM INFORMATION DISCLOSURES**

PROGRAM NAME: ASSOCIATE OF SCIENCE IN SURGICAL TECHNOLOGY CIP CODE: 51.0909 PROGRAM LENGTH: TOTAL WEEKS TO COMPLETE CREDIT UNITS: 61 ON-TIME COMPLETION (WEEKS):

Programmatically accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Accreditation Review Committee on Education in Surgical Technology. Certification is currently not required to work as a Surgical Technologist in California, but is required in other jurisdiction.

#### RELATED OCCUPATION

OCCUPATION TITLES	SOC CODES	O*NET LINK		
Surgical Technologists: Surgical Technologist (CST), Surgical Technician, Certified Surgical Technologist (CST), Operating Room Surgical Technician (OR St), Surgical Scrub Technologist, Surgical Scrub Technician, Endoscopic Technologist, Operating Room Technician (OR Tech)	29-2055.00	55.00 http://www.onetonline.org/link/ summary/29-2055.00		
Medical Equipment Preparers: Sterile Processing Technician, Central Sterile Supply Technician (CSS Technician), Certified Registered Central Service Technician (CRCST), Central Service Technician (CST), Instrument Technician, Sterilization Technician, Central Processing Technician (CPT), Sterile Preparation Technician, Sterile Processing and Distribution Technician (SPD Technician), Equipment Technician	31-9093.00	http://www.onetonline.org/link/ summary/31-9093.00		
TUITION AND FEES	\$30,216.00			
BOOKS AND SUPPLIES	\$2,050.00			
ON-TIME COMPLETION RATE				
STUDENT RETENTION RATE	1			
PLACEMENT RATES	1			
MEDIAN TITLE IV LOAN DEBT	PROGRAM COMMENCING JULY 6, 2020			
MEDIAN PRIVATE LOAN DEBT				
MEDIAN INSTITUTIONAL FINANCING DEBT	1			

TUITION FEES						
EFFECTIVE April 01, 2022						
	ACADEMIC YEAR 1	ACADEMIC YEAR 2				
TUITION	\$14,370.00	\$15,075.00				
REGISTRATION FEE	\$75.00	\$0.00				
STRF	\$80.00	\$0.00				
SUB-TOTAL	\$14,461.00	\$15,075.00				
BOOKS	\$1,380.00	\$0.00				
UNIFORMS	\$80.00	\$0.00				
SUPPLIES	\$300.00	\$300.00				
KIT FEES	\$90.00	\$0.00				
MEDICAL FEES	\$0.00	\$600.00				
BACKGROUND CHECK	\$0.00	\$80.00				
SUB-TOTAL	\$1,850.00	\$980.00				
TOTAL BY ACADEMIC YEAR	\$16,375.00	\$16,055.00				
TOTAL COSTS	\$32,430.00					

CLASS SCHEDULE				
DIDACTIC TRAINING	MONDAY-FRIDAY	8:00AM-12:0PM		
		6:00PM-10:00PM		
CLINICAL ROTATION / EXTERNSHIP	Monday-Friday	Hours are dependent on the schedule provided by the supervisor of the clinical facility where the student is assigned to do the training		

mental instrumentation, suture and needle uses, dressing, and drainage systems. Assisting the surgeon, Standard Precautions and OSHA guidelines, preparing supplies, equipment care, inventory maintenance and documentation are also integral segments of this phase of the curriculum. Patient care concepts and responsibilities of sterile and non-sterile personnel are also covered. This phase also covers instruction in the surgical specialties to supplement the practical application of theory and techniques in general, gastro-intestinal, plastic/reconstructive, otorhinolaryngologic, obstetric and gynecologic procedures. Ophthalmic, neurosurgical, thoracic, genitourinary, vascular and pediatric procedures are presented as well. Endoscopic and Laser procedure considerations are also covered. The role of the surgical team, ethical, legal and moral considerations, preoperative, intraoperative, and postoperative care of the patient, and safety practices are significant aspects of the instruction.

The fourth phase, Clinical Procedures (Practice) includes issues such as professional, workplace, and selfmanagement. Students participate under supervision in direct patient care and the surgical procedures in the surgical setting. Experiences include central or sterile services, instrument reprocessing, operating room and post-anesthesia unit activities.

All student activities associated with the curriculum, especially while students are completing clinical rotations, will be educational in nature. Students will not be substituted for hired staff personnel within the clinical institution, in the capacity of a surgical technologist.

The Surgical Technologist functions in association with nurses, anesthesiologists and surgeons as part of the operating room team to provide care to the patient during the crucial periods of surgery. The Surgical Technologist must create and maintain a safe operating room environment through aseptic surgical techniques. The Surgical Technologist must know the fundamental steps and routine procedures needed to assist the surgeon in the use of surgical instrumentation. Maintaining the equipment and sterile supplies needed to successfully complete each operation is essential to perform efficiently as a member of the surgical team.

To complete the program, students must sit for the certification examination administered by the National Board of Surgical Technology and Surgical Assisting. Graduates will qualify for employment as entry-level Surgical Technologists.

*Revised Surgical Rotation Case Requirements according to the Core Curriculum for Surgical Technology, 6th Edition* 

Students must complete a minimum of 120 cases as delineated below.

A. General Surgery Cases

Students must complete a minimum of 30 cases in General Surgery; 20 which must be performed in the First Scrub Role. The remaining 10 cases may be performed in either the First or Second Scrub Role.

# B. Specialty Cases

- Students must complete a minimum of 90 cases in various surgical specialties, excluding General Surgery; 60 which must be performed in the First Scrub Role. The additional 30 cases may be performed in either the First or Second Scrub Role.
- A minimum of 60 surgical specialty cases must be performed in the First Scrub Role and distributed amongst a minimum of four surgical specialties.
- A minimum of 10 cases in the First Scrub Role must be completed in each of the required minimum of four surgical specialties (40 cases total required).
- The additional 20 cases in the First Scrub Role may be distributed amongst any one surgical specialty or multiple surgical specialties.
- The remaining 30 surgical specialty cases may be performed in any surgical specialty either in the First or Second Scrub Role.

# C. Optional Surgical Specialties

- Diagnostic endoscopy cases and vaginal delivery cases are not mandatory. However, up to 10 diagnostic endoscopic cases and 5 vaginal delivery cases can be counted toward the maximum number of Second Scrub Role cases.
- Diagnostic endoscopy cases must be documented in the category of "Diagnostic Endoscopy", rather than by specialty.
- Vaginal delivery cases must be documented in the category of "Labor & Delivery" rather than in the OB/GYN specialty.
- D. Case experience in the Second Scrub Role is not mandatory.
- E. Observation cases must be documented, but do not count towards the 120 required cases.

- 7. Clinical Site require from the student a medical clearance before starting a clinical rotation. The medical clearance would include, but may not be limited to:
  - Physical Exam
  - CBC (copy of blood count result)
  - TB Test (if positive = chest x-ray)
  - Hepatitis B immunity (positive blood titer), if negative proof of Hepatitis B vaccination.
  - MMR positive blood titer (if negative proof of MMR vaccination or 1 proof of booster shot)
  - Varicella positive blood titer (if negative = 1 proof of varicella vaccination)
  - Tdap documentation of dose within the last 2 years
  - Flu Shot

- Satisfactory completion of all phases (I, II, III), with no grades lower than 70% (C) in any course and with
  completion of all courses within the maximum time frame is required for graduation. In addition, participation in a minimum of 120 cases as delineated in the Revised Surgical Rotation Case Requirements
  according to the Core Curriculum for Surgical Technology, 6th Edition and participation in the Certified
  Surgical Technology (CST) Examination are requirements for graduation from the Surgical Technology
  Program. Diplomas are awarded to all graduates.
- All bona fide students of the Surgical Technician program are encouraged to be members of the Association of Surgical Technologists. Information on how to become members is provided by the instructor at the beginning of the program. Upon successful completion of the program, graduates are required to take the National Certifying Examination for Surgical Technologists administered at designated test centers by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).
- The College assists the graduates in applying for this examination. Membership and test fees are not part of the tuition and fees paid to the school. The students are responsible for payment of these fees.

#### **Important Notices:**

- 1. Effective January 2005 affiliate hospitals are requiring students to undergo a criminal background check prior to their externship rotation at the clinical site. This is in compliance with The Joint Commission New Management of Human Resources for all employees, volunteers, and students.
- 2. All Surgical Technician students 18 years and older must show evidence that they have completed a criminal background check which includes criminal history (Superior and Municipal Courts where applicable), Social Security verification, OIG name search, and Sexual Offender Identification.
- 3. The College will forward the results of check and all other relevant information to the affiliate site prior to assignment of the student. The affiliate reserves the right to accept or deny assignment of the student based on the evaluation of the information provided.
- 4. The College is committed to supporting its affiliate facilities in complying with The Joint Commision Standards and all other regulatory bodies that help assure the highest level of quality patient care and safety are adhered to.
- 5. In February, 2011, the Academic Review Council on Education in Surgical Technology and Surgical Assistant (ARC/STSA) finally announced that effective August 1, 2011, the NBSTSA's National Certified Surgical Technologist (CST) exam will be the only approved outcomes assessment examination for reporting program outcomes on the ARC/STSA Annual Report. Programs which continued the use of the AST Program Assessment Exam (PAE) for the academic year August 1, 2010 to July 31, 2011 must transition to the CST exam as their outcome assessment indicator for all graduates beginning August 1, 2011. It is therefore required that taking the National Certification Examination for Surgical Technologist be mandatory for all students graduating from a CAAHEP accredited program.
- 6. Attendance in the review is mandatory; If a student missed 2 consecutive review days, the student will be removed from the list of students scheduled to take the Web Based Testing at the College and will have to take the Certification Exam in other AMP Approved Testing Sites.

COURS	COURSE OUTLINE							
COURSE CODE	COURSE TITLE	THE- ORY CLOCK HOURS	LAB CLOCK HOURS	EXTERNSHIP CLOCK HOURS	CREDIT UNITS	TOTAL WEEKS TO COMPLETE CREDIT UNITS		
ST101	ENGLISH COMPOSITION	45	-	-	3	2.25		
ST102	BUSINESS MATH	45	-	-	3	2.25		
ST103	GENERAL PSYCHOLOGY	45	-	-	3	2.25		
ST201	INTRODUCTION TO SURGICAL TECHNOLOGY	20	-	-	1.3	1		
ST202	HUMAN BIOLOGY PART 1	40	-	-	2.7	2		
ST203	HUMAN BIOLOGY PART 2	100	-	-	6.7	5		
ST204	PATHOLOGY FUNDAMENTALS	40	-	-	2.7	2		
ST205	PHARMACOLOGY & ANESTHESIA CONCEPTS	40	-	-	2.7	2		
ST206	BIOMEDICAL SCIENCES	40	-	-	2.7	2		
ST301	PATIENT CARE & PRINCIPLES OF SURGERY	12	8	-	1.1	1		
ST302	ASEPSIS	24	16	-	2.1	2		
ST303	FUNDAMENTAL OF O.R. TECH- NIQUES	84	56	-	7.5	7		
ST304	BASIC SURGICAL PROCEDURES	168	112	-	14.9	14		
ST401	CENTRAL SUPPLY / INSTRUMENT PROCESSING	-	-	120	2.7	3		
ST402	OPERATING ROOM ROTATION	-	-	520	11.6	13		
	TOTALS	703	192	640	67.5	61		
	PROGRAM TOTALS 1535							

Satisfactory completion of all courses within the allowed maximum time frame for the program and a minimum grade average of 70% (C) are required for graduation. Diplomas are awarded to all graduates.

# COURSE DESCRIPTION

**GENERAL EDUCATION** 

**ST101 - ENGLISH COMPOSITION** 

#### (45 HRS. - 3.00 CREDIT UNITS)

To provide students experience in writing essays with a variety of purposes and to allow students to practice writing in general and to polish skills in organization, grammar, style, and mechanics. Students also learn the principles of defining research problems and developing research strategies. Readings for this course are selected from American writers.

#### ST102 - BUSINESS MATH

# (45 HRS. - 3.00 CREDIT UNITS)

To provide students with reinforcement of mathematical computations to challenge them to understand how to process and interpret information to arrive at logical conclusions to common business math applications.

#### ST103 - GENERAL PSYCOLOGY

# (45 HRS - 3.00 CREDIT UNITS)

The microbiology and pathophysiology of diseases, and the different bodily responses are discussed in this section. Basic concepts of immunology are also covered.

#### PHASE 1: BASIC SCIENCES

ST200 - INTRODUCTION TO SURGICAL TECHNOLOGY

# (20 HRS. - 1.3 CREDIT UNITS)

Job responsibilities and functions of surgical technologists are taught in this course. The role of the surgical technologist in relation to the role of the other members of the surgical team is emphasized. Basic medical terminology is included.

### ST201 - HUMAN BIOLOGY - PART 1

#### (40 HRS. - 2.7 CREDIT UNITS)

Human anatomical descriptions, fundamental body structures, and the structure and functions of all body organ/systems are covered in this course. Abnormalities/diseases associated with the various body systems so that its correlation to the normal functions can be understood are also emphasized.

#### ST202 - HUMAN BIOLOGY - PART 2

# (100 HRS. - 6.7 CREDIT UNITS)

This course is a continuation of Human Biology - Part I. It covers the study of the parts and functions of the following body systems: endocrine, cardiovascular, circulatory, lymphatic, respiratory, digestive, urinary, and reproductive. Abnormalities/ diseases associated with the various body systems so that its correlation to the normal functions can be understood are also emphasized.

# ST204 - PATHOLOGY FUNDAMENTALS

(40 HRS - 2.7 CREDIT UNITS)

The microbiology and pathophysiology of diseases, and the different bodily responses are discussed in this section. Basic concepts of immunology are also covered.

#### ST205- PHARMACOLOGY AND ANESTHESIA CONCEPTS

#### (40 HRS - 2.7 CREDIT UNITS)

The common drugs used in surgery and anesthesia, their mechanism of actions, indications, adverse reactions, and drug interactions are discussed. Also covered are the principles of anesthesia administration, possible complications and interventions.

#### ST206 - BIOMEDICAL SCIENCE

# (40 HRS. - 2.7 CREDIT UNITS)

This section introduces the basic principles of electricity, physics, robotics, and computers in relation to the practice of surgical technology.

# PHASE 2: CORE CONCEPTS

#### ST301 - PATIENT CARE & PRINCIPLES OF SURGERY

This is an introduction to surgical procedures and techniques. Understanding why surgeries are performed and the role of the surgical technologist and the team members are emphasized. The organization and administration of OR's is studied along with ethical, legal and moral considerations. The surgical technologist is instructed as to the biopsychosocial needs of the patient to sustain life.

# ST302 - ASEPSIS

(40 HRS. - 2.1 CREDIT\_UNITS)

This section covers sterilization, disinfection, antisepsis, and the principles, methods and techniques of asepsis preoperatively, intraoperatively and postoperatively. Hand hygiene, surgical scrub, gowning, gloving, surgical, counts, and draping are also covered.

### ST303 - FUNDAMENTAL O.R. TECHNIQUES

#### (140 HRS. - 7.5 CREDIT UNITS)

This course covers the fundamentals of O.R. (Surgical techniques which include preoperative (non-sterile) intraoperative (sterile) and postoperative techniques. It also covers perioperative case management and assistant circulator role.

# ST304 - BASIC SURGICAL PROCEDURES

# (280 HRS - 14.9 CREDIT UNITS)

Introduction to surgical procedures and the various surgeries performed in the different organ/systems of the body. Anatomy, physiology and pathophysiology are reviewed.

Fundamentals of common major and minor procedures in general, Gynecologic, ENT, and GI procedures are developed. Assisting the surgeon/s in routine activities common to many procedures is emphasized. CPR for emergencies is also covered.

# PHASE 3: EXTERNSHIP

#### ST401 - CENTRAL SUPPLY/INSTRUMENT PROCESSING

(120 HRS. - 2.7 CREDIT UNITS)

This course comprises the first three weeks of the third phase. It is spent in the central service department of a hospital. It is an intensive hands-on training in instrument processing, terminal disinfection and sterilization. In this phase, the student is trained to perform any combination of the following duties: manual and mechanical disinfection of surgical instruments, containers, and equipment; inspection, preparation and packaging of instrumentation, equipment and reusable supplies; steam and chemical sterilization and the methods to monitor the processes; requisition, record keeping, storage and distribution tasks. The students will learn the operation and use of equipment like washer/sterilizer, ultrasonic cleaner and sterilizers.

# ST 402 - OPERATING ROOM ROTATION

#### (520 HRS. - 11.6 CREDIT UNITS)

This is the last thirteen (13) weeks of the third phase. It is spent in the operating room of a hospital where theories and practices learned and acquired are applied through participation under supervision in actual surgeries as a surgical technologist in scrub role. During this clinical training, progress is closely monitored and supervised.

#### (20 HRS. - 1.1 CREDIT UNITS)