



A DUAL ENROLLMENT CAREER PATHWAY FOR

SURGICAL TECHNOLOGY

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About the Program

- Doctors and nurses are not the only medical staff at work in an operating room. Surgical technologists are vital team members in this crucial setting.
- Get a head start on your Surgical Technology (SUR) program by completing some SUR general education courses while still in high school.
- Be ready to begin SUR courses in the fall after high school and graduate with your Surgical Technology Degree in 4 terms.

About the Pathway

- High school students take dual enrollment classes at **Tri-County Technical College**.
- Upon completion of the SUR program, become a Certified Surgical Technologist after passing the NBSTSA (National Board of Surgical Technology and Surgical Assisting) certification exam.
- As a CST (Certified Surgical Technologist), qualify for employment with hospitals, physician offices, or outpatient surgery centers.
- The Bureau of Labor Statistics estimates the number of Surgical Technologists is expected to increase by 9% through 2028.

Surgical Technology CAREER PATHWAY

IN HIGH SCHOOL

Fall of 12th Grade Year:

- AHS 102 (if no TAP credit)
- ENG 101

Spring of 12th Grade Year:

- BIO 101*
- MAT 155

*Must be taken prior to BIO 225

For Health Science Technology students:

TAP credit available for AHS 102 with successful completion of TAP exam.

**HIGH SCHOOL GRADUATION
AND
13 HOURS COLLEGE CREDIT**

AFTER HIGH SCHOOL

Associate in Applied Science Degree Surgical Technology

FALL	• SUR 101	• SUR 102	• BIO 225 FALL ONLY	• Humanities (PH110 RECOMMENDED)
SPRING	• SUR 103	• SUR 104	• BIO 210 SPRING ONLY	• SPC 205
SUMMER	• SUR 105	• SUR 110	• BIO 211	
FALL	• PSY 201	• SUR 111	• SUR 120	• SUR 130

SC Mean Annual Wages
\$47,987

AFTER TCTC GRADUATION

As a CST you can:
work in Hospitals, Physician Offices,
and outpatient surgical centers

BACHELOR OF SCIENCE - SURGICAL TECHNOLOGIST

CONNECT WITH US

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SURGICAL TECHNOLOGY COURSE DESCRIPTIONS

The Surgical Technology program prepares students to perform various duties during surgery, by assisting in the maintenance of an aseptic environment through a system of specific techniques and practices. The technologist contributes to overall patient care as part of the surgical team by passing equipment and instruments to the surgeon, assisting the surgeon, selecting instruments for surgical cases, setting up cases, and assisting the circulatory personnel intraoperatively. Surgical Technologists may find employment in hospitals, clinics, or physicians' offices. Hospital employment areas include operating and emergency rooms, labor and delivery, endoscopy units, central sterile processing areas, and ambulatory surgery centers.

AHS 102 - Medical Terminology

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course covers medical terms, including roots, prefixes and suffixes, with emphasis on spelling, definition, and pronunciation.

BIO 101 - Biological Science I

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, population genetics, natural selection, evolution, and ecology. Laboratory requirement supplements lecture.

Prerequisites: Satisfactory placement test scores for ENG 101 or completion of ENG 101, ENG 103, ENG 155 or ENG 100 and RDG 100. Satisfactory placement test scores for MAT 101 or completion of MAT 101 or MAT 032. Completion of BIO 105 and CHM 105 replaces MAT and ENG prerequisites. All prerequisite courses require a grade of C or better.

Note: Credit may not be earned for both BIO 101 and BIO 105 or BIO 113.

BIO 210 - Anatomy and Physiology I

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is the first in a sequence of courses, including an intensive coverage of the body as an integrated whole. All body systems are studied. Topics include terminology, biological chemistry, cells, tissues, and the following systems: integumentary, skeletal, muscular, nervous, special senses. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 101 or BIO 113 with a grade of C or better.

Note: Credit may not be earned for both BIO 210 and BIO 112.

BIO 211 - Anatomy and Physiology II

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is a continuation of a sequence of courses, including intensive coverage of the body as an integrated whole. All body systems are studied. A continuation of BIO 210, the following systems are studied: endocrine, circulatory, lymphatic, respiratory, digestive, urinary, fluids and electrolytes, reproductive. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 210 with a grade of C or better.

BIO 225 - Microbiology

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is a detailed study of microbiology as it relates to infection and the disease processes of the body. Topics include immunity, epidemiology, medically important microorganisms, and diagnostic procedures for identification. Laboratory requirement supplements lecture.

Prerequisites: Completion of BIO 101 or BIO 113 with a grade of C or better.

Note: Credit may not be earned for both BIO 225 and BIO 115.

ENG 101 - English Composition I

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is a (college transfer) course in which the following topics are presented: a study of composition in conjunction with appropriate literary selections, with frequent theme assignments to reinforce effective writing. A review of standard usage and the basic techniques of research are also presented.

Prerequisites: Satisfactory Writing placement score or a grade of C or higher in ENG 100 or in ENG 155 and satisfactory Reading placement score or a grade of C or higher in RDG 100.

MAT 155 - Contemporary Mathematics

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes techniques and applications of the following topics: elementary number theory; algebra; geometry; measurement; graph sketching and interpretations, and descriptive statistics.

Prerequisites: Satisfactory math placement score or MAT 032 with a grade of "C*" or higher.

Note: This course cannot be used for an AA or AS degree..

PHI 110 - Ethics

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of the moral principles of conduct emphasizing ethical problems and modes of ethical reasoning.

PSY 103 - Human Relations

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is a study of human relations, including the dynamics of behavior, interrelationships, and personality as applied in everyday life.

PSY 201 - General Psychology

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics and concepts in the science of behavior: scientific method, biological bases for behavior, perception, motivation, learning memory, development, personality, abnormal behavior, therapeutic techniques, and social psychology.

Prerequisites: Reading and writing placement scores for ENG 101 or completion of ENG 100, ENG 101, or ENG 155 with a grade of C or higher. BIO 101 strongly recommended.

SPC 205 - Public Speaking

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to principles of public speaking with application of speaking skills.

Prerequisites: A grade of C or higher in ENG 101 or in ENG 103 or in ENG 155 or in ENG 156.

SUR 101 - Introduction to Surgical Technology

Class Hours: 4 Lab Hours: 3 Credit Hours: 5

This course includes a study of the surgical environment, team concepts, aseptic technique, hospital organization, basic instrumentation and supplies, sterilization, principles of infection control, and wound healing.

Prerequisites: BIO 101, ENG 101, and MAT 155. All prerequisites require a grade of C or higher.

Note: This course is only offered in Fall.

SUR 102 - Applied Surgical Technology

Class Hours: 4 Lab Hours: 3 Credit Hours: 5

This course covers the principles and application of aseptic technique, the perioperative role, and medical/legal aspects.

Prerequisite: SUR 101. All prerequisite courses require a grade of C or higher.

SUR 103 - Surgical Procedures I

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of a system to system approach to surgical procedures and relates regional anatomy, pathology, specialty equipment, and team responsibility. Patient safety, medical/legal aspects, and drugs used in surgery are emphasized.

Prerequisites: SUR 101, SUR 102, and BIO 225. All prerequisite course requires a grade of C or higher.

Note: This course is only offered in Spring.

SUR 104 - Surgical Procedures II

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of the various specialties of surgical procedures.

Prerequisites: SUR 101, SUR 102, SUR 103, and BIO 225. All prerequisite courses require a grade of C or higher.

Note: This course is only offered in the Spring.

SUR 105 - Surgical Procedures III

Credit Hours: 4

This course is a study of advanced specialties of surgical procedures.

Prerequisites: SUR 103, SUR 104, and BIO 210. All prerequisite courses require a C or higher.

Corequisites: SUR 110 and SUR 130

Note: This course is only offered in the Summer.

SUR 110 - Introduction to Surgical Practicum

Class Hours: 0 Lab Hours: 15 Credit Hours: 5

This course is an introduction to the application of surgical techniques by assisting in the perioperative roles in various clinical affiliations.

Prerequisites: SUR 103, SUR 104, and BIO 210. All prerequisite courses require a C or higher.

Corequisites: SUR 105 and SUR 130.

Note: This course is only offered in the Summer.

SUR 111 - Basic Surgical Practicum

Class Hours: 2 Lab Hours: 15 Credit Hours: 7

This course includes the application of theory under supervision in the perioperative role in various clinical affiliations.

Prerequisites: SUR 105, SUR 110, SUR 130. All prerequisite courses require a grade of C or higher.

Corequisite: SUR 120.

Note: This course is only offered in the Fall.

SUR 120 - Surgical Seminar

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course includes the comprehensive correlation of theory and practice in the perioperative role.

Prerequisites: SUR 105, SUR 110, and SUR 130. All prerequisite courses require a grade of C or higher.

Corequisite: SUR 111.

Note: This course is only offered in Fall.

SUR 130 - Biomedical Science for the Surgical Technologist

Credit Hours: 1

This course includes basic principles of energy modalities, robotics, laser technology, and hybrid operating rooms as they relate to safe patient care practices in the operating room.

Prerequisites: SUR 103, SUR 104, and BIO 210. All prerequisite course require a grade of C or higher. Corequisites: SUR 105 and SUR 110

Note: This course is only offered in Summer.



TCTC
Tri-County Technical College