

# AAS Surgical Technology McLENNAN COMMUNITY COLLEGE

2023-2024

# **Degree Description**

Degree Description: Accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA. (25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763; www.caahep.org; 727-210-2350)

This two-year associate degree program is designed to prepare entry level surgical technologists to be an integral part of the medical team providing surgical care to patients in a variety of settings. Surgical technologists are individuals with specialized education who function as members of the surgical team in the role of scrub person. This individual works under the supervision of a surgeon to ensure that the operating room or environment is safe, that equipment function properly, and that the operative procedure is conducted under conditions that maximize patient safety.

Students who would like to apply for acceptance into the Surgical Technology Program at McLennan are required to take the TSI Assessment and be TSI complete prior to enrolling in college courses. A student has three years to complete the surgical technology curriculum after official enrollment in the first surgical technology course. Contact the program director for more information.

#### Marketable Skills:

- 1. Graduates will communicate effectively in the healthcare setting.
- 2. Graduates will use critical thinking and problem-solving skills in the perioperative setting.
- 3. As an entry-level surgical technologist, graduates will a. demonstrate the application of the principles of asepsis in a knowledgeable manner that provides for optimal patient care. b. demonstrate safe practice techniques regarding perioperative routines, patient transportation, and positioning. c. demonstrate basic surgical case preparation skills.

Semester I	Hours
BIOL 2401 Anatomy & Physiology I	4 hours
HPRS 1206 Essentials of Medical Terminology	2 hours
ENGL 1301 Composition I or ENGL 2311 Technical & Business Writing	3 hours
SPCH 1311 Introduction to Speech Communication or	
SPCH 1315 Public Speaking or SPCH 1318 Interpersonal Communication or	
SPCH 1321 Business & Professional Communication	3 hours
PSYC 2301 General Psychology or	
SOCI 1301 Introduction to Sociology <sup>1</sup>	3 hours
	15 hours
Semester II	Hours
BIOL 2402 Anatomy & Physiology II	4 hours
HPRS 2301 Pathophysiology	3 hours
MATH 1314 College Algebra or	
MATH 1332 Contemporary Mathematics (Quantitative Reasoning) or MATH 1342 Elementary Statistical Methods	3 hours
BIOL 2420 Microbiology for Non-Science Majors	4 hours
	14 hours
Summer Semester	Hours
SRGT 1405 Introduction to Surgical Technology	4 hours
	4 hours
Semester IV	Hours
SRGT 1441 Surgical Procedures I	4 hours
SRGT 1660 Clinical - Surgical Technology/Technologist	6 hours
SRGT 1409 Fundamentals of Perioperative Concepts & Techniques	4 hours
	14 hours
SRGT 1442 Surgical Procedures II	4 hours
SRGT 1391 ST in Surgical/Operating Room Tech	3 hours
SRGT 2660 Clinical - Advanced Surgical Technology	6 hours
	13 hours

Total hours: 60 hours

<sup>1</sup> This course is a competitive entry program. All required academic courses must be complete with a grade of C or better prior to the application deadline. SRGT courses may only be taken after acceptance to the program.

# **Course Descriptions**

## **BIOL 2401 Anatomy & Physiology I**

Anatomy and Physiology I is the first part of a two-course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, and nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. NOTE: Must have passed the reading and writing portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 4 (3 lec/3 lab)

## **HPRS 1206 Essentials of Medical Terminology**

A study of medical terminology, word origin, structure, and application. Semester Hours 2 (2 lec)

#### **ENGL 1301 Composition I**

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis is on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus is on writing the academic essay as a vehicle for learning, communication, and critical analysis. Note: ENGL 1301 is a pre-requisite for all 2000-level literature courses. Prerequisite: TSI complete in Writing or the equivalent. Semester Hours 3 (3 lec)

## **ENGL 2311 Technical & Business Writing**

Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice of individual and collaborative processes involved in the creation of ethical and efficient documents. Prerequisite: TSI complete in Writing or the equivalent. Semester Hours 3 (3 lec)

## **SPCH 1311 Introduction to Speech Communication**

Introduces basic human communication principles and theories embedded in a variety of contexts, including interpersonal, small group, and public speaking. Semester Hours 3 (3 lec)

# SPCH 1315 Public Speaking

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Semester Hours 3 (3 lec)

#### **SPCH 1318 Interpersonal Communication**

Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts, including friendships, romantic partners, families, and relationships with co-workers and supervisors. Semester Hours 3 (3 lec)

## **SPCH 1321 Business & Professional Communication**

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats. Semester Hours 3 (3 lec)

## **PSYC 2301 General Psychology**

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0302 or INRW 0402. Semester Hours 3 (3 lec)

# **SOCI 1301 Introduction to Sociology**

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. Semester Hours 3 (3 lec)

# **BIOL 2402 Anatomy & Physiology II**

Anatomy and Physiology II is the second part of a two-course sequence. It is a study of the structure and function of the human body including the following systems: endocrine, cardiovascular, immune, lymphatic, respiratory, digestive (including nutrition), urinary (including fluid and electrolyte balance), and reproductive (including human development and genetics). Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Prerequisite: BIOL 2401 with a grade of C or better. Semester Hours 4(3 lec/3 lab)

# **HPRS 2301 Pathophysiology**

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. Prerequisite: A course in anatomy and physiology or medical terminology or consent of division director. Semester Hours 3 (3 lec)

# MATH 1314 College Algebra

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Prerequisite: TSI math complete or MATH 0311. Semester Hours 3 (3 lec)

# MATH 1332 Contemporary Mathematics (Quantitative Reasoning)

Intended for Non-STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered. Graphing calculator required. Prerequisite: TSI math complete or MATH 0308. Semester Hours 3 (3 lec)

# **MATH 1342 Elementary Statistical Methods**

Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. Graphing calculator required. Prerequisite: TSI math complete or MATH 0308 or completion of college-level math course. Semester Hours 3 (3 lec)

# **BIOL 2420 Microbiology for Non-Science Majors**

This course covers basic microbiology and immunology and is primarily directed at pre-nursing, pre-allied health, and non-science majors. It provides an introduction to historical concepts of the nature of microorganisms, microbial diversity, the importance of microorganisms and acellular agents in the biosphere, and their roles in human and animal diseases. Major topics include bacterial structure as well as growth, physiology, genetics, and biochemistry of microorganisms. Emphasis is on medical microbiology, infectious diseases, and public health. Prerequisite: BIOL 1406, 1408, 1409, 2401 or 2404 with a grade of C or better. Semester Hours 4 (3 lec/3 lab)

# SRGT 1405 Introduction to Surgical Technology

Orientation to surgical technology theory, surgical pharmacology and anesthesia, technological sciences, and patient care concepts. Semester hours 4 (3 lec/ 2 lab)

#### SRGT 1441 Surgical Procedures I

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis is on surgical procedures related to the diagnostics, general, OB/GYN, genitourinary, otorhinolaryngology, and orthopedic surgical specialties incorporating instruments, equipment and supplies required for safe patient care. Prerequisite: Take SRGT 1405, SRGT 1409, SRGT 1260, and SRGT 2130 with a minimum grade of C or better. Semester hours 4 (3 lec/2 lab)

#### SRGT 1660 Clinical - Surgical Technology/Technologist

A health-related, work-based learning experience that enables the student to apply specialized oocupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Successful completion of first semester of SRGT courses with a grade of C or better. Semester Hours 6 (12 clinical hours/week)

#### SRGT 1409 Fundamentals of Perioperative Concepts & Techniques

In-depth coverage of perioperative concepts such as aseptic principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. Admissions/Acceptance into the Surgical Technology program. Semester hours 4 (3 lec/2 lab)

## **SRGT 1442 Surgical Procedures II**

Introduction to surgical pathology and its relationship to surgical procedures. Emphasis on surgical procedures related to the cardiothoracic, peripheral vascular, plastic/reconstructive, ophthalmology, oral/maxillofacial, and neurological surgical specialties incorporating instruments, equipment, and supplies required for safe patient care. Semester hours 4 (3 lec/2 lab)

#### SRGT 1391 ST in Surgical/Operating Room Tech

Topics address recently identified current events, skills, knowledges, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. This course will include capstone and exit exams, practice exams, resume and career preparation, and certification exam completion. Semester Hours 3 (3 lec)

## SRGT 2660 Clinical - Advanced Surgical Technology

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This is a capstone course. Prerequisite: Successful completion of previous two semesters of SRGT courses with a grade of C or better. Semester hours 6 (19.50 clinical hours/week)