
Surgical Technician Program Courses

SST 100: Law and Ethics for Allied Health Professionals

In this course, students are introduced to and explore the implications of law and ethics for allied health professionals. Standards of conduct for physicians, as well as guidelines for medical assistants, are covered. Discussion of laws for health professionals, requirements to practice medicine, legal documentation, recordkeeping, and cultural differences are included.

SST 101: Applied Anatomy & Physiology I

This course presents the structure and function of the human body, gross anatomy, microscopic anatomy, and histology. It also explores human physiology. This course is one part of a two parts and will cover the following areas of biology: the chemical level of organization, cell structure and function, the tissue, the integumentary system, the skeletal system, and the muscular system.

SST 102: Applied Anatomy & Physiology II

This course is a continuation of SST 101 and explores the structure and function of the human body. It includes a thorough study of body cells and tissues and body systems including: sensory organs, endocrine system, cardiovascular system, the lymphatic system, the digestive system, the urinary system, the reproductive systems and development and inheritance.

SST 103: Microbiology and Asepsis

This course covers microbiology and the identification of basic equipment used to understand microorganisms, their structure and characteristics and the conditions that affect the life and death of microorganisms and their relationship between humans and pathogenic and non-pathogenic bacteria, factors that enable pathogens to invade a host and cause disease. The wounding and healing process is covered as well as the fundamentals of contamination, sanitization, disinfection, and sterilization of instruments, supplies and items used in OR.

SST 104: Surgical Technology and Fundamentals

This course introduces the students to the broad field of surgical technology. It is a prerequisite course to entry into clinical training sequence of courses. The historical development of surgical technology is covered including identification of different types of health care facilities, various agencies, their management and effect on health delivery including: understanding procedures for accrediting hospitals and educational programs; surgical team member's role; professional organizations and other materials relevant to OR practice. The principles and techniques of disinfection and antisepsis are also covered.

SST 105: Pharmacology and Anesthesia

This course covers the medications required in surgical procedures, their terminology, classification, actions/effects, and abbreviations, conversion equivalent units of one system to another, simple math measurements, delivery, dose calculations, drug preparations, care, and handling. Preoperative medications, types and phases of anesthesia, its selection, delivery, medications, devices, and complications are also covered.

SST 106: Perioperative Principles I

This course covers skills that are specifically those of the first scrub role. This course teaches the principles and practice of scrub role in an active hands-on manner in the OR of Mandl School with special emphasis on creation and maintenance of the sterile field, identification of basic instruments by type, function, and name and their care, handling and assembly, identification and preparation of surgical supplies, identification, preparation and handling of sutures, identification, preparation and handling of needles, identification, assembling and handling of accessory and special equipment, and principles of draping.

SST 107: Perioperative Principles II

This course covers skills that are not specifically those of the first scrub role. The principles and practice of the circulator are examined as well as the proper and safe execution of procedures and use of equipment. Special emphasis is on non-sterile as well as sterile field, identification of basic instruments

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SST 108: Pathophysiology

This course covers general pathological concepts including cell pathology, tumor, infection, and disease that upset homeostasis. Diseases and disorders of each body system including the diagnostic tests used for identification of the disease are addressed.

SST 109: Surgical Procedures I

This course covers basic surgical interventions “level I” with emphasis on common diseases and surgical procedures in relation to Endoscopic procedures, general surgery, obstetric and gynecological, ophthalmic, otorhinolaryngologic, oral and maxillofacial, plastic, and reconstructive, genitourinary, orthopedics, cardiothoracic, peripheral vascular, and neurosurgical procedures. This course takes place in operating room in the Global Allied Health Solutions. Hands on experiences in planning for, setting up, carrying out, and breaking down a case, and preparing and handling supplies and instruments common to most surgical procedures are the focus of this course.

SST 110: Surgical Procedures II

This course presents an in-depth study of basic surgical interventions “level II” with emphasis on common diseases and surgical procedures in relation to endoscopic procedures, general surgery, obstetric and gynecological, ophthalmic, otorhinolaryngologic, oral and maxillofacial, plastic, and reconstructive, genitourinary, orthopedics, cardiothoracic, peripheral vascular, and neurosurgical procedures. This course takes place in operating room in the Global Allied Health Solutions. Hands on experiences in planning for, setting up, carrying out, and breaking down a case are covered as well as preparing and handling supplies and instruments common to most surgical procedures.

SST 111: Surgical Procedures III

This course covers basic surgical interventions “level III” with emphasis on common diseases and surgical procedures addressed in SST 109 and SST 110. This course takes place in operating room in Global Allied Health Solutions. Hands on experience in planning for, setting up, carrying out, and breaking down a case, and preparing and handling supplies and instruments common to most surgical procedure are the focus of this course.

SST 112: Advanced Surgical Topics

This course covers the basics of electricity and physics and their application in the operating suites in terms of appliances, machinery and atmosphere and their safe usage, including a study of basic of surgical robotics and new developments in surgical procedures by their usage.

