UTAH SYSTEM OF HIGHER EDUCATION

Utah System of Higher Education
Surgical Technology
FY2024 / 38 Credits (1305 Clock-Hours)

Foundational Courses

Aligned Courses

TESU 1010 Introduction to Surgical Technology **3 Credits / 90 Clock-Hours**

The Introduction to Surgical Technology course will introduce students to the surgical technology profession and will develop the fundamental concepts and principles necessary to successfully participate as a member of the surgical team.

Objectives:
• Analyze relevant medical terminology.
• Describe the development of the Surgical Technology profession.
• Analyze operating room environment and identify commonly used equipment and instrumentation.
• Evaluate Preoperative, Intraoperative, and Postoperative case preparation.
• Assess surgical consents and patient identification.
• Explain healthcare organization and describe team member roles and communication.
• Discuss medical law and ethics, surgical conscience, and surgical documentation.
• Identify and demonstrate the use of surgical attire throughout the perioperative setting.

TESU 1020 Microbiology and Infection Control **2 Credits / 60 Clock-Hours**

The Microbiology and Infection Control course will introduce students to microbiology, infection control, and aseptic principles.

Objectives:
• Correlate infection control in relation to microbiology, the diseases they cause, and procedures used to treat infections.
• Analyze anatomy and physiology of microorganisms and the immune system.
• Summarize disinfection and decontamination practices.
• Identify biopsychosocial needs of the patient and the process of death and dying.
• Discuss the history and pioneers of microbiology.

TESU 1030 Surgical Pharmacology **2 Credits / 60 Clock-Hours**

The Surgical Pharmacology course will introduce students to medication used in surgery and anesthesia care.

Objectives:
• Analyze all hazards and disaster preparation.
• Differentiate medications and types of anesthesia used in surgery.
• Examine anesthesia preparation, administration, and monitoring for the patient.
• Calculate medication doses.
• Assess fluid and blood loss during surgery.
• Prepare and manage medication on the field.
• Demonstrate surgical counts.
• Identify emergency situations and anesthesia complications.

TESU 1040 Principles and Practices of Surgical Technology **3 Credits / 90 Clock-Hours**

The Principles and Practices of Surgical Technology course will introduce students to wound management, and healing. They will be familiar with perioperative care and the principles of asepsis, and attain stills for patient positioning, prepping, and draping.

Objectives:
• Explain hemostasis, wound healing, and tissue closure.
• Outline perioperative case management.
• Demonstrate the principles of asepsis.
• Analyze patient prepping and positioning.
• Differentiate stapling and closure devices.

TESU 1050 Surgical Procedures I **2 Credits / 60 Clock-Hours**

The Surgical Procedures I course will review surgical specialties and differentiate anatomy, physiology, and instrumentation pertaining to the specialty. They will demonstrate several procedures set ups throughout the specialties.

Objectives:
• Discuss select instrumentation, equipment, supplies, and drugs used for the relevant specialties.
• Analyze relevant body systems and related pathophysiology leading to surgeries.
• Review relevant medical terminology.
• Demonstrate surgical case set ups.
• Assess perioperative care and complications.

TESU 1060 Surgical Procedures II **2 Credits / 60 Clock-Hours**

The Surgical Procedures II course will review surgical specialties and differentiate anatomy, physiology, and instrumentation pertaining to the specialty. They will demonstrate several procedures set ups throughout the specialties.

Objectives:
• Discuss select instrumentation, equipment, supplies, and drugs used for the relevant specialties.
• Analyze relevant body systems and related pathophysiology leading to surgeries.
• Review relevant medical terminology.
• Demonstrate surgical case set ups.
• Assess perioperative care and complications.

TESU 1070 Surgical Procedures III **3 Credits / 90 Clock-Hours**

The Surgical Procedures III course will review surgical specialties and differentiate anatomy, physiology, and instrumentation pertaining to the specialty. They will demonstrate several procedures set ups throughout the specialties.

Objectives:
• Discuss select instrumentation, equipment, supplies, and drugs used for the relevant specialties.
• Analyze relevant body systems and related pathophysiology leading to surgeries.
• Review relevant medical terminology.
• Demonstrate surgical case set ups.
• Assess perioperative care and complications.

TESU 1080 Comprehensive Final Exams **2 Credits / 60 Clock-Hours**

The Comprehensive Lab Final course is designed to provide the students with the ability to perform skills learned in the lab and lab competencies in professional medical facilities operating rooms.

Objectives:
• Perform surgical technology principles of aseptic and surgical technique in the professional medical facility operating rooms.
• Demonstrate successfully performance as an operating room team member.
• Explain the process to enter the clinical externship surgical rotation.

TESU 1220 Surgical Technology Seminar **2 Credits / 60 Clock-Hours**

The Surgical Technology Seminar course will discuss factors associated with making career decisions that can enhance a surgical technologist's professional growth and success. This course will also review competencies learned throughout the program in order to sit for the national certification exam.

Objectives:
• Review for the national certifying exam.
• Prepare students for employment.

TESU 2900 Surgical Technology Clinical Externship I **4 Credits / 180 Clock-Hours**

The Surgical Technology Clinical Externship I course will extend the educational experience in the surgical field under the supervision of experienced medical professionals in a clinical setting.

Objectives:
• Practice decontamination standards and procedures for both sterile and non-sterile instrumentation and equipment.
• Demonstrate spatial relations within a surgical field.
• Implement infection control procedures, hazard communication, and health and safety procedures.
• Demonstrate skills for scrubbing, gowning, gloving, and draping.
• Integrate employability skills.
• Assist with patient care.
• Facilitate case preparation.

TESU 2910 Surgical Technology Clinical Externship II **4 Credits / 180 Clock-Hours**

The Surgical Technology Clinical Externship II course will extend the educational experience in the surgical field under the supervision of experienced medical professionals in a clinical setting.

Objectives:
• Practice decontamination standards and procedures for both sterile and non-sterile instrumentation and equipment.
• Demonstrate spatial relations within a surgical field.
• Implement infection control procedures, hazard communication, and health and safety procedures.
• Demonstrate skills for scrubbing, gowning, gloving, and draping.
• Integrate employability skills.
• Assist with patient care.
• Facilitate case preparation.

TESU 2920 Surgical Technology Clinical Externship III **3 Credits / 135 Clock-Hours**

The Surgical Technology Clinical Externship III course will extend the educational experience in the surgical field under the supervision of experienced medical professionals in a clinical setting.

Objectives:
• Practice decontamination standards and procedures for both sterile and non-sterile instrumentation and equipment.
• Demonstrate spatial relations within a surgical field.
• Implement infection control procedures, hazard communication, and health and safety procedures.
• Demonstrate skills for scrubbing, gowning, gloving, and draping.
• Integrate employability skills.
• Assist with patient care.
• Facilitate case preparation.

Supplemental Courses Varies by Institution

Davis

TESU 1110 Surgical Patient Care **2 Credits / 60 Clock-Hours**

This course introduces concepts relevant to caring for patients having surgery. Discussion of patient response to illness and the prospect of undergoing surgical intervention, as well as information for specific population groups will assist the surgical technologist in anticipating special needs and equipment that may be necessary during the surgical procedure. Knowledge and skills utilized both for patient preparation for surgery and care during the procedure will be acquired during this course.

Objectives:
• Identify the rights of health care consumers to receive quality patient care.
• Assess the physical, spiritual, and psychological needs of a patient.
• Describe preoperative routines.
• Demonstrate an understanding of the process used to obtain informed consent for a surgical procedure or treatment.
• Discuss the methods and types of documentation used in the operating room.
• Describe the identification process for surgical patients.
• Discuss, demonstrate, and apply the principles of surgical positioning.
• Prepare the operative site for surgery.

TESU 1120 Skills Lab I **2 Credits / 60 Clock-Hours**

The Skills Lab I course introduces students to the basic "hands-on" skills that will be performed during the clinical/externship portion of this program. You will practice each skill set until you are safe, comfortable, and competent. The skillset will then be signed off by the lab instructor.

Objectives:
• Demonstrate the following skills:
o Open gloving.
o Surgical hand scrub.
o Gowning and gloving (self and others).
o Opening sterile supplies.
o Creating and maintaining a sterile field.
o Dispensing, handling, and labeling medications and solutions.
o Performing surgical counts.
o Draping the surgical site.
o Basic instrumentation and instrument passing.
o Proper handling and labeling of surgical specimens.
o Moving around a sterile field.
o Critical thinking skills.
o Safety in a sterile surgical setting.
o Skills pass off.

TESU 1125 Skills Lab II **2 Credits / 60 Clock-Hours**

The Skills Lab II course will task the student with combining the basic skills that were learned in the previous lab component with more advanced skills. Students are now in the final preparation phase for entry into the clinical/externship portion of the program and must become competent and efficient with setting up for and anticipating the flow of activities that occur during a surgical procedure.
In order to successfully complete this lab component and be scheduled to begin a clinical externship, students are expected to perform all steps of the final lab skill assessment.

Objectives:
• Demonstrate the following skills:
o Preoperative case selection and preparation.
o Specialty surgery case set-up.
o Specialty instrumentation.
o Draping for various surgical specialties.
o Intraoperative practice in various surgical specialties.
o Intraoperative case management.
o Postoperative case management and environmental sanitation.
o Advanced sterile technique exercises.
o Critical thinking scenarios.
o Timed final skills checklist pass-off.

Mountainland

TESU 1025 Microbiology and Infection Control II **1 Credit / 30 Clock-Hours**

In the Microbiology and Infection Control II course, students will advance in microbiology and the relationship to the practice of sterile technique and infection control in the operative setting.

Objectives:
• Evaluate the structure and characteristics of different microorganisms.
• Analyze the variable for the preparation of instrumentation and equipment for disinfection and the sterilization process.
• Analyze the relevant medical terminology.
• Identify the General Surgery Major Instruments.
• Describe the functions of the Lymphatic, Immune, and Endocrine Systems.
• Demonstrate the correct care, handling, and labeling of specimens.
• Discuss the various surgical pathologies of each body system and how pathophysiology relates to surgical interventions.
• Explain the methods and materials used to create microbial barriers.

TESU 1035 Surgical Pharmacology II **1 Credit / 30 Clock-Hours**

In the Surgical Pharmacology II course, students will advance in the use and identification of medications used in surgery and anesthesia care.

Objectives:
• Assess the side effects and contraindications for the use of various medications and anesthetic drugs.
• Demonstrate the principles, measurement, and recording of vital signs.
• Discuss how sterile technique is used in relation to anesthesia procedures.
• Explain the side effects and contraindications for the use of various medications and anesthetic drugs.
• Identify the equipment used during anesthesia administration.
• Assess the action uses, and mode of administration of medications and anesthetic agents used in the care of the surgical patient.
• Analyze the roles of the surgical technologist and circulator during the administration of anesthesia.

TESU 1055 Surgical Procedures I Advanced **2 Credits / 60 Clock-Hours**

In the Surgical Procedures I Advanced course, students will review surgical skills and differentiate anatomy, physiology, and instrumentation pertaining to the specialties. Students will demonstrate advanced skills and techniques throughout the surgical specialties.

Objectives:
• Demonstrate the advanced isolation skills competencies of an Exploratory Laparotomy surgical procedure.
• Demonstrate the skills and competencies of a Total Vaginal Hysterectomy surgical procedure.
• Identify the relevant anatomy and physiology.
• Review the relevant medical terminology.
• Analyze various general surgery, colon resection surgery, ear, nose, and throat, oral maxillofacial, plastic, and reconstructive surgery.
• Identify various instrumentation related to the surgical procedures.

TESU 1065 Surgical Procedures II Advanced **2 Credits / 60 Clock-Hours**

In the Surgical Procedures II Advanced course, students will review surgical skills and differentiate anatomy, physiology, and instrumentation pertaining to the specialties. Students will demonstrate advanced skills and techniques related to trauma throughout the surgical specialties.

Objectives:
• Demonstrate the skills competencies of an Orthopedic surgical procedure.
• Identify relevant anatomy and physiology.