# AHS - SURGICAL TECHNOLOGY

Credit Hour ratios represent full term, weekly hours, where the first digit represents the weekly lecture hour, the second digit represents the weekly lab/studio hour, and the third digit represents credits.

For example, a typical 3 credit lecture course will be displayed as: **3-0-3**. More information is available on the Catalog - Credit Hour page (https://catalog.dccc.edu/courses/credit-hour-ratio/).

#### AHS 100 Surgical Technology I

The basic knowledge and fundamental techniques necessary for assuming the responsibilities of a surgical technologist are highlighted. Preoperative and intraoperative patient care concepts, with both nonsterile and sterile responsibilities, are emphasized. Workplace management concepts, such as medical-legal aspects, ethics, cultural sensitivity, the hospital and operating room environment, and scope of practice are introduced. This course also includes study and skill development relating to surgical instrumentation, devices and equipment; modes of patient transport and safety precautions; variations and precautions in surgical positioning and care of surgical patients; preoperative patient preparation including surgical site antisepsis; consent for surgery; use of the Universal Protocol for surgical procedure, patient and site verification; and other important intraoperative risk management processes and procedures. Related patient care procedures such as taking vital signs, laboratory study review, wound healing, specimen management, intraoperative medication management; anesthesia, sterilization and disinfection are included. Upon successful completion of this course, students should be able to:

Upon successful completion of this course, students should be able to: Describe the role, function and relationship of the surgical technologist to other members of the surgical team.

Utilize a vocabulary of medical terms related to surgical patient care. Identify microbiological principles underlying the prevention and control of infection, sterilization and disinfection methods, and aseptic technique. Review common safety risks for surgical patients and the strategies to manage them before and during a surgical intervention.

Discuss the preoperative nonsterile and sterile responsibilities of the surgical technologist in the preparation of a patient for a surgical procedure. Discuss the case management responsibilities of the surgical technologist in the preparation of the operating room for a surgical procedure. Describe the intraoperative responsibilities of the surgical technologist in performing the role of the scrubbed team member during a surgical

Prerequisite: AHM 220, AHS 101\* and (AHM 104 or BIO 150)\*. Courses marked with (\*) may be taken concurrently

5 Credits5-0-5

procedure.

#### AHS 101 Surgical Technology Practicum I

This course includes clinical assignment in operating room of affiliating health agencies. Selected learning experience in the application of preoperative and intraoperative patient care concepts, with both nonsterile and sterile responsibilities, are emphasized as the student integrates theory with practice during assignment to surgical patients undergoing basic surgical interventions. NOTE Prerequisite: Clearance card from College Health Office

Upon successful completion of this course, students should be able to: Demonstrate correct opening and preparation of supplies used in the operating room.

Demonstrate competency in handling basic surgical instruments and devices.

Establish a safe operating room environment for the surgical patient.

Utilize sterile technique when creating and maintaining surgical field.

Demonstrate competency in hand and surgical site antisepsis, gowning and gloving the self and members of the surgical team.

Participate in intraoperative activities such as surgical counts, suture preparation, and involvement in other basic intraoperative case management activities.

Participate in preoperative case management activities such as patient transport and positioning patients in the surgical position designated by surgeon.

Participate in the terminal cleaning, sterilization, and packaging of sterile instruments and supplies.

Prerequisite: AHM 220, AHS 100\* and (AHM 104 or BIO 150)\*. Courses marked with (\*) may be taken concurrently

5 Credits 0-10-5

## AHS 102 Surgical Technology II

This course is a continuation of Surgical Technology I. Knowledge and techniques basic to effective performance as a scrubbed team member in the operating room will be stressed. An intense review of the surgical specialties focuses on pathophysiology, diagnostic interventions, the surgical intervention (special considerations, position/positioning aids, incisions, supplies, equipment, instrumentation, procedural steps, counts and specimen care) and complications. The responsibilities of the surgical technologist in intraoperative case management during intermediate surgical interventions are emphasized. The role of the unsterile circulating team member is reviewed as the concepts of teamwork, consideration and cooperation of the surgical team are

Upon successful completion of this course, students should be able to: Describe the responsibilities of the surgical technologist in assisting the registered nurse circulator during a surgical procedure.

Identify surgical interventions, instruments, sutures and accessory items used during intermediate surgical interventions such as the following: hernia repair; breast surgery; thyroid and parathyroid surgery; surgery of the biliary tract, pancreas and spleen; gastrointestinal surgery; gynecological surgery;genitourinary surgery; thoracic surgery; vascular surgery; cardiac surgery; neurosurgery; ENT; and orthopedic surgery.

Prerequisite: AHS 100 and AHS 101 and AHS 103\* and (AHM 104 or BIO 150), and (AHM 105 or BIO 151)\* Courses marked with (\*) may be taken concurrently

4 Credits4-0-4

#### AHS 103 Surgical Technology Practicum II

Clinical assignment in operating room of affiliating agency. Knowledge and techniques basic to effective performance as a scrubbed member of general surgery and specialty surgery will be stressed. Developing and improving skills as the scrub person and in the organization of work is emphasized. Progression to solo scrub experiences is expected, enabling the student to focus on anticipating the needs of the surgical team. Students will be expected to display manual and mental dexterity in the use of surgical instruments in a step-by-step fashion for specific surgical interventions. Assignments will also be made with the anesthesia department and in the post anesthesia care unit (PACU), during which the student will correlate the actions and uses of anesthetic agents and recovery from them and as a second assistant to the registered nurse circulator, during which the student will focus on providing a safe, efficient environment for the surgical patient and respecting the patient's inherent right to privacy, dignity, and culturally competent care. Upon successful completion of this course, students should be able to: Choose and assemble the instruments, supplies and accessory items used during intermediate surgical interventions such as hernia repair; breast surgery; thyroid and parathyroid surgery; surgery of the biliary tract, liver, pancreas and spleen; gastrointestinal surgery; gynecological surgery; genitourinary surgery; thoracic surgery; vascular surgery; cardiac surgery; neurosurgery; ENT; and orthopedic surgery.

Demonstrate ability to function as a scrubbed member of the surgical team during intermediate surgical interventions such as hernia repair; breast surgery; thyroid and parathyroid surgery; surgery of biliary tract, liver pancreas and spleen; gastrointestinal surgery; gynecological surgery; genitourinary surgery; thoracic surgery; vascular surgery; cardiac surgery; neurosurgery; ENT; and orthopedic surgery.

Collaborate with the registered nurse circulator and anesthesia team in providing a safe, efficient patient care environment.

Prerequisite: AHS 100 and AHS 101 and AHS 102\* and (AHM 104 or BIO 150), and (AHM 105 or BIO 151)\* Courses marked with (\*) may be taken concurrently

# 6 Credits 0-12-6

# AHS 200 Surgical Technology III

This course is a continuation of Surgical Technology II. Knowledge and techniques basic to effective performance as a scrubbed member in the operating room are stressed. The responsibilities of the surgical technologist in the care and safety of the patient during and after the surgical intervention, in the general and specialty fields of surgery, are reviewed.

Upon successful completion of this course, students should be able to: Identify operative procedures, surgical instruments, accessory items and suture materials used in advanced surgical interventions such as surgery of the eye, plastic and reconstructive surgery, pediatric surgery, and surgery of the burn, trauma and transplant patient.

Prerequisite: AHS 102 and AHS 103 and AHS 201\*. (\*May be taken concurrently.)

### 1 Credit3-0-1

#### AHS 201 Surgical Technology Practicum III

Clinical assignment in the operating room of an affiliating agency. Selected learning experiences in advanced surgical interventions in general and specialty surgery are included. Focus is directed on independent role assumption as a surgical technologist to facilitate transition from student to graduate.

Upon successful completion of this course, students should be able to:
Assemble the instruments and supplies necessary for advanced surgical interventions such as surgery of the eye; plastic and reconstructive surgery; pediatric surgery; burn surgery; trauma surgery, and transplant surgery.
Demonstrate the ability to function as a member of the sterile surgical team during advanced surgical interventions such as surgery of the eye; plastic and reconstructive surgery, pediatric surgery, burn surgery; trauma surgery; and transplant surgery.

Prerequisite: AHS 102 and AHS 103 and AHS 200.\* \*(May be taken concurrently.)

6 Credits

24 Weekly Lab Hours