



# Standards and Guidelines for the Accreditation of Educational Programs in Surgical Technology

Essentials/Standards initially adopted in 1972; revised in 1991, 2000, 2002, 2004, 2013, and 2021 and effective August 1, 2022.

Developed by

Accreditation Review Council on Education in  
Surgical Technology and Surgical Assisting

Endorsed by

American College of Surgeons  
Association of Surgical Technologists

and

Approved by the  
Commission on Accreditation of Allied Health Education Programs

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits programs upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

These accreditation **Standards** are the minimum standards of quality used in accrediting programs that prepare individuals to enter the Surgical Technology profession. **Standards** are the minimum requirements to which an accredited program is held accountable. Guidelines are descriptions, examples, or recommendations that elaborate on the Standards. Guidelines are not required but can assist with interpretation of the Standards.

Standards are printed in regular typeface in outline form. *Guidelines are printed in italic typeface.*

## Preamble

The Commission on Accreditation of Allied Health Education Programs (CAAHEP), Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA), and the American College of Surgeons (ACS), and the Association of Surgical Technologists (AST) cooperate to establish, maintain and promote appropriate standards of quality for educational programs in Surgical Technology and to provide recognition for educational programs that meet or exceed the minimum standards outlined in these accreditation **Standards and Guidelines for the Accreditation of Educational Programs**. CAAHEP encourages innovation and quality education programs throughout the CAAHEP accreditation process, consistent with the CAAHEP policy on institutional autonomy. These **Standards and Guidelines** are designed to ensure the integrity of the CAAHEP accreditation process. Directories of accredited programs are published for the information of students, employers, educational institutions and organizations, credentialing bodies, and the public.

These **Standards and Guidelines** are to be used for the development, evaluation, and self-analysis of Surgical Technology programs. Site visit teams assist in the evaluation of a program's compliance with the accreditation standards.

## **Description of the Profession**

Surgical technologists are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients in a variety of settings.

The surgical technologist works under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual works under the supervision of a surgeon to ensure that the operating room or environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety

A surgical technologist possesses expertise in the theory and application of sterile and aseptic technique and combines the knowledge of human anatomy, surgical procedures, and implementation tools and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

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### **I. Sponsorship**

#### **A. Program Sponsor**

A program sponsor must be at least one of the following:

1. A post-secondary academic institution accredited by an institutional accrediting agency that is recognized by the U.S. Department of Education and must be authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of an Associate Degree at the completion of the program.
2. A post-secondary academic institution outside of the United States and its territories that is authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of an Associate Degree or equivalent at the completion of the program.
3. A hospital, clinic or medical center accredited by a healthcare accrediting agency that is recognized by the U.S. Department of Health and Human Services, and authorized under applicable law to provide healthcare, and authorized under applicable law to provide the post-secondary program, which awards a minimum of an Associate Degree at the completion of the program.
4. A branch of the United States Armed Forces, or a federal or state governmental agency, which awards a minimum of an Associate Degree at the completion of the program.
5. A consortium, which is a group made up of two or more education providers that operate an educational program through a written agreement that outlines the expectations and responsibilities of each of the partners. At least one of the consortium partners must meet the requirements of a program sponsor set forth in I.A.1.- I.A.4.

Consortium does not refer to clinical affiliation agreements with the program sponsor.

## **B. Responsibilities of Program Sponsor**

The program sponsor must:

1. Ensure that the program meets the Standards; and
2. Award academic credit for the program or have an articulation agreement with an accredited post-secondary institution; and
3. Have a preparedness plan in place that assures continuity of education services in the event of an unanticipated interruption.

*Examples of unanticipated interruptions may include unexpected departure of key personnel, natural disaster, public health crisis, fire, flood, power failure, failure of information technology services, or other events that may lead to inaccessibility of educational services.*

## **II. Program Goals**

### **A. Program Goals and Minimum Expectations**

The program must have the following minimum expectations statement: “To prepare entry-level Surgical Technologists who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.”

Programs that adopt educational goals beyond the minimum expectations statement must provide evidence that all students have achieved those goals prior to entry into the field.

Program goals must be compatible with the mission of the sponsoring institution(s), the expectations of the communities of interest, and accepted standards of roles and functions of an entry-level Surgical Technologist. Goals are based upon the substantiated needs of health care providers and employers, and the educational needs of the students served by the educational program. Program goals must be written referencing one or more of the learning domains.

The program must assess its goals at least annually and respond to changes in the needs and expectations of its communities of interest.

*Nothing in this Standard restricts programs from formulating goals beyond entry-level competence.*

### **B. Program Advisory Committee**

The program advisory committee must include at least one representative of each community of interest and must meet annually. Communities of interest served by the program include, but are not limited to, students, graduates, faculty members, sponsor administrators, employers, physicians, and the public.

The program advisory committee advises the program regarding revisions to curriculum and program goals based on the changing needs and expectations of the program’s communities of interest, and an assessment of program effectiveness, including the outcomes specified in these Standards.

*Program advisory committee meetings may be conducted using synchronous electronic means.*

### III. Resources

#### A. Type and Amount

Program resources must be sufficient to ensure the achievement of the program's goals and outcomes. Resources must include, but are not limited to:

1. Faculty;
2. Administrative and support staff;
3. Curriculum;
4. Finances;
5. Faculty and staff workspace;
6. Space for confidential interactions;
7. Classroom and laboratory (physical or virtual);
8. Ancillary student facilities;
9. Clinical affiliates;
10. Equipment;
11. Supplies;
12. Information technology;
13. Instructional materials; and
14. Support for faculty professional development.

#### B. Personnel

The sponsor must appoint sufficient faculty and staff with the necessary qualifications to perform the functions identified in documented job descriptions and to achieve the program's stated goals and outcomes.

At a minimum, the following positions are required.

##### 1. Program Director

The sponsor must appoint a full-time Program Director.

Full-time is defined as the usual and customary time commitment required by the institution for faculty members in equivalent positions in other health educational activities.

##### a. Responsibilities

The Program Director must be responsible for all aspects of the program, including but not limited to:

- 1) Administration, organization, supervision of the program; and
- 2) Continuous quality review and improvement of the program; and
- 3) Academic oversight, including curriculum planning and development.

*The Program Director should pursue ongoing formal training designed to maintain and upgrade his/her professional, instructional, and administrative capabilities.*

*The Program Director should participate in an ARC/STSA sponsored accreditation workshop at least once every five years.*

b. Qualifications

The Program Director must:

- 1) Possess a minimum of an Associate Degree; and
- 2) Have documented education or experience in instructional methodology, curriculum design and program planning; and
- 3) Be a graduate of an education program in surgical technology accredited by a nationally recognized programmatic accreditation agency; and
- 4) Possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission on Certifying Agencies (NCCA); and
- 5) Have a minimum total of five years of experience, either in the operating room scrub role or as an instructor in surgical technology, or a combination of both, within the past ten years.

Persons approved as program directors under previous Standards will continue to be approved in that position at that institution.

*The Program Director should possess experience/training as an educator.*

*The Associate Degree should have a concentration in surgical technology.*

## 2. Clinical Coordinator

a. Responsibilities

The Clinical Coordinator must:

- 1) Coordinate clinical education; and
- 2) Provide administration, organization, and provide supervision of student clinical experience; and
- 3) Ensure documentation of the evaluation and progression of clinical performance leading to clinical competence; and
- 4) Provide continuous quality review and improvement of student clinical experience; and
- 5) Provide academic oversight, including curriculum planning and development of student clinical experience; and
- 6) Ensure orientation to the program's requirements of the personnel who supervise or instruct students at clinical sites; and
- 7) Coordinate the assignments of students to clinical sites.

*Responsibilities may include didactic and laboratory instruction (in addition to clinical instruction) and direction and guidance of clinical instructors.*

*The Clinical Coordinator should pursue ongoing formal training designed to maintain and upgrade his/her professional, instructional, and administrative capabilities.*

b. Qualifications

The Clinical Coordinator must:

- 1) Be a graduate of an education program in surgical technology accredited by a nationally recognized programmatic accreditation agency; and

- 2) Possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission on Certifying Agencies (NCCA); and
- 3) Have a minimum of three years of documented experience, either in the operating room scrub role or as an instructor in surgical technology, or a combination of both, within the past five years; and
- 4) Possess knowledge of the curriculum; and
- 5) Possess knowledge about the program's evaluation of student learning and performance.

Persons approved as Clinical Coordinators under previous Standards will continue to be approved in that position at that institution.

*The Program Director may serve as Clinical Coordinator provided qualifications for both positions are met.*

### **3. Faculty/Instructional Staff**

#### **a. Responsibilities**

For all didactic, laboratory, and clinical instruction to which a student is assigned, there must be a qualified individual(s) clearly designated by the program to provide instruction, supervision, and timely assessments of the student's progress in meeting program requirements.

#### **b. Qualifications**

Faculty/instructional staff must be effective in teaching and knowledgeable in subject matter as documented by appropriate professional credential(s)/certification(s), education, and experience in the designated content area.

Faculty with instructional responsibilities in core surgical technology courses must:

- 1) Be a graduate of an education program in surgical technology accredited by a nationally recognized programmatic accreditation agency; and
- 2) Possess a credential in the field of surgical technology through a national certification program that is accredited by the National Commission on Certifying Agencies (NCCA); and
- 3) Have a minimum total of two years of experience, either in the operating room scrub role or as an instructor in surgical technology, or a combination of both, within the past five years.

Persons approved as didactic/clinical faculty and/or instructional staff under previous Standards will continue to be approved in that position at that institution.

*Core surgical technology courses include the components of Surgical Technology fundamentals and practice. Examples of non-core courses include Medical Terminology, Pharmacology, Pathophysiology, Anatomy and Physiology, Microbiology, and other general education courses not specific to surgical technology.*

*The didactic/clinical faculty with instructional responsibilities in core surgical technology courses should pursue ongoing formal training designed to maintain and upgrade professional and instructional capabilities.*

## C. Curriculum

The curriculum content must ensure that the program goals are achieved. Instruction must be based on clearly written course syllabi that include course description, course objectives, methods of evaluation, topic outline, and competencies required for graduation. Instruction must be delivered in an appropriate sequence of classroom, laboratory, and clinical activities.

The program must demonstrate that the curriculum offered meets or exceeds the content and competencies specified in the most current edition of the **Core Curriculum for Surgical Technology** listed in Appendix B of these **Standards**.

*Program length should be sufficient to ensure student achievement of the curriculum content.*

*ARC/STSA and CAAHEP supports and encourages innovation in the development and delivery of the curriculum.*

## D. Resource Assessment

The program must, at least annually, assess the appropriateness and effectiveness of the resources described in these **Standards**. The results of the resource assessment must be the basis for ongoing planning and change. An action plan must be developed when needed improvements are identified in the program resources. Implementation of the action plan must be documented, and results measured by ongoing resource assessment.

# IV. Student and Graduate Evaluation/Assessment

## A. Student Evaluation

### 1. Frequency and purpose

Evaluation of students must be conducted on a recurrent basis and with sufficient frequency to provide both the students and program faculty with valid and timely indications of the students' progress toward and achievement of the curriculum competencies in the required learning domains.

*Validity means that the evaluation methods chosen are consistent with the learning and performance objectives being tested.*

*The evaluation system should document each student's knowledge, performance-based strengths and areas needing improvement.*

*The documentation should include a plan for routine communication, a copy of all forms used in communicating, a description of how the department and institution handles problem or failing students, and student evaluation of the communication process.*

### 2. Documentation

Student evaluations must be maintained in sufficient detail to document learning progress and achievements.

## **B. Outcomes**

The program must meet the established outcomes thresholds.

### **1. Assessment**

The program must periodically assess its effectiveness in achieving established outcomes. The results of this assessment must be reflected in the review and timely revision of the program.

Outcomes assessments must include but are not limited to national credentialing examination(s) performance, programmatic retention, graduate satisfaction, employer satisfaction, and placement in full or part-time employment in the profession or in a related profession.

A national certification examination program must be accredited by the National Commission for Certifying Agencies (NCCA), American National Standards Institute (ANSI), or under International Organization for Standardization (ISO).

A related profession is one in which the individual is using cognitive, psychomotor, and affective competencies acquired in the educational program.

Graduates pursuing academic education related to progressing in health professions or serving in the military are counted as placed.

### **2. Reporting**

At least annually, the program must submit to the ARC/STSA the program goal(s), outcomes assessment results, and an analysis of the results.

If established outcomes thresholds are not met, the program must participate in a dialogue with and submit an action plan to the ARC/STSA that responds to the identified deficiency(ies). The action plan must include an analysis of any deficiencies, corrective steps, and timeline for implementation. The program must assess the effectiveness of the corrective steps.

## **V. Fair Practices**

### **A. Publications and Disclosure**

1. Announcements, catalogs, publications, advertising, and websites must accurately reflect the program offered.
2. At least the following must be made known to all applicants and students
  - a. Sponsor's institutional and programmatic accreditation status;
  - b. Name and website address of CAAHEP;
  - c. Admissions policies and practices;
  - d. Technical standards;
  - e. Occupational risks;
  - f. Policies on advanced placement, transfer of credits and credits for experiential learning;
  - g. Number of credits required for completion of the program;
  - h. Availability of articulation agreements for transfer of credits;
  - i. Tuition/fees and other costs required to complete the program;
  - j. Policies and processes for withdrawal and for refunds of tuition/fees; and
  - k. Policies and processes for assignment of clinical experiences.

3. At least the following must be made known to all students
  - a. Academic calendar;
  - b. Student grievance procedure;
  - c. Appeals process;
  - d. Criteria for successful completion of each segment of the curriculum and for graduation; and
  - e. Policies by which students may perform clinical work while enrolled in the program.
  
4. The sponsor must maintain and make accessible to the public on its website a current and consistent summary of student/graduate achievement that includes one or more of these program outcomes: national credentialing examination(s), programmatic retention, and placement in full or part-time employment in the profession or a related profession as established by the ARC/STSA.

## **B. Lawful and Non-discriminatory Practices**

All activities associated with the program, including student and faculty recruitment, student admission, and faculty employment practices, must be non-discriminatory and in accord with federal and state statutes, rules, and regulations. There must be a faculty grievance procedure made known to all paid faculty.

## **C. Safeguards**

The health and safety of patients/clients, students, faculty, and other participants associated with the educational activities of the students must be adequately safeguarded. Surgical Technology students must be readily identifiable as students.

All activities required in the program must be educational and students must not be substituted for staff.

## **D. Student Records**

Grades and credits for courses must be recorded on the student transcript and permanently maintained by the program sponsor in an accessible and secure location. Students and graduates must be given direction on how to access their records. Records must be maintained for student admission, advisement, and counseling while the student is enrolled in the program.

## **E. Substantive Change**

The sponsor must report substantive change(s) as described in Appendix A to ARC/STSA in a timely manner. Additional substantive changes to be reported to ARC/STSA within the time limits prescribed include:

1. Facilities; change in location/program physical address
2. Maximum Enrollment Capacity (MEC)
3. Change of ownership
4. Distance education (deletion/addition)
5. Satellite (deletion/addition)
6. Consortium partnership (deletion/addition).

## **F. Agreements**

There must be a formal affiliation agreement or memorandum of understanding between the program sponsor and all other entities that participate in the education of the students describing the relationship, roles, and responsibilities of the program sponsor and that entity.

## APPENDIX A

### Application, Maintenance and Administration of Accreditation

#### A. Program and Sponsor Responsibilities

##### 1. Applying for Initial Accreditation

- a. The chief executive officer or an officially designated representative of the sponsor completes a “Request for Accreditation Services” form and returns it electronically or by mail to:

Accreditation Review Council on Education in Surgical Technology  
and Surgical Assisting  
19751 Mainstreet # 339  
Parker, CO 80138

The “Request for Accreditation Services” form can be obtained from the [CAAHEP website](#).

**Note:** There is **no** CAAHEP fee when applying for accreditation services; however, individual committees on accreditation may have an application fee.

- b. The program undergoes a comprehensive review, which includes a written self-study report and an on-site review.

The self-study instructions and report form are available from the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA). The on-site review will be scheduled in cooperation with the program and ARC/STSA once the self-study report has been completed, submitted, and accepted by the ARC/STSA.

##### 2. Applying for Continuing Accreditation

- a. Upon written notice from the ARC/STSA, the chief executive officer or an officially designated representative of the sponsor completes a “Request for Accreditation Services” form, and returns it electronically or by mail to:

Accreditation Review Council on Education in Surgical Technology  
and Surgical Assisting  
19751 Mainstreet # 339  
Parker, CO 80138

The “Request for Accreditation Services” form can be obtained from the [CAAHEP website](#).

- b. The program may undergo a comprehensive review in accordance with the policies and procedures of the ARC/STSA.

If it is determined that there were significant concerns with the conduct of the on-site review, the sponsor may request a second site visit with a different team.

After the on-site review team submits a report of its findings, the sponsor is provided the opportunity to comment in writing and to correct factual errors prior to the ARC/STSA forwarding a recommendation to CAAHEP.

### **3. Administrative Requirements for Maintaining Accreditation**

- a. The program must inform the ARC/STSA and CAAHEP within a reasonable period of time (as defined by the committee on accreditation and CAAHEP policies) of changes in chief executive officer, dean of health professions or equivalent position, and required program personnel (Refer to Standard III.B.).
- b. The sponsor must inform CAAHEP and the ARC/STSA of its intent to transfer program sponsorship. To begin the process for a Transfer of Sponsorship, the current sponsor must submit a letter (signed by the CEO or designated individual) to CAAHEP and the ARC/STSA that it is relinquishing its sponsorship of the program. Additionally, the new sponsor must submit a "Request for Transfer of Sponsorship Services" form. The ARC/STSA has the discretion of requesting a new self-study report with or without an on-site review. Applying for a transfer of sponsorship does not guarantee that the transfer will be granted.
- c. The sponsor must promptly inform CAAHEP and the ARC/STSA of any adverse decision affecting its accreditation by recognized institutional accrediting agencies and/or state agencies (or their equivalent).
- d. Comprehensive reviews are scheduled by the ARC/STSA in accordance with its policies and procedures. The time between comprehensive reviews is determined by the ARC/STSA and based on the program's on-going compliance with the Standards, however, all programs must undergo a comprehensive review at least once every ten years.
- e. The program and the sponsor must pay ARC/STSA and CAAHEP fees within a reasonable period of time, as determined by the ARC/STSA and CAAHEP respectively.
- f. The sponsor must file all reports in a timely manner (self-study report, progress reports, probation reports, annual reports, etc.) in accordance with ARC/STSA policy.
- g. The sponsor must agree to a reasonable on-site review date that provides sufficient time for CAAHEP to act on an ARC/STSA accreditation recommendation prior to the "next comprehensive review" period, which was designated by CAAHEP at the time of its last accreditation action, or a reasonable date otherwise designated by the ARC/STSA.

Failure to meet any of the aforementioned administrative requirements may lead to administrative probation and ultimately to the withdrawal of accreditation. CAAHEP will immediately rescind administrative probation once all administrative deficiencies have been rectified.

### **4. Voluntary Withdrawal of a CAAHEP- Accredited Program**

Notification of voluntary withdrawal of accreditation from CAAHEP must be made by the Chief Executive Officer or an officially designated representative of the sponsor by writing to CAAHEP indicating: the desired effective date of the voluntary withdrawal, and the location where all records will be kept for students who have completed the program.

## **5. Requesting Inactive Status of a CAAHEP- Accredited Program**

Inactive status for any accredited program may be requested from CAAHEP at any time by the Chief Executive Officer or an officially designated representative of the sponsor writing to CAAHEP indicating the desired date to become inactive. No students can be enrolled or matriculated in the program at any time during the time period in which the program is on inactive status. The maximum period for inactive status is two years. The sponsor must continue to pay all required fees to the ARC/STSA and CAAHEP to maintain its accreditation status.

To reactivate the program the Chief Executive Officer or an officially designated representative of the sponsor must provide notice of its intent to do so in writing to both CAAHEP and the ARC/STSA. The sponsor will be notified by the ARC/STSA of additional requirements, if any, that must be met to restore active status.

If the sponsor has not notified CAAHEP of its intent to re-activate a program by the end of the two-year period, CAAHEP will consider this a “Voluntary Withdrawal of Accreditation.”

## **B. CAAHEP and Committee on Accreditation Responsibilities – Accreditation Recommendation Process**

1. After a program has had the opportunity to comment in writing and to correct factual errors on the on-site review report, the ARC/STSA forwards a status of public recognition recommendation to the CAAHEP Board of Directors. The recommendation may be for any of the following statuses: initial accreditation, continuing accreditation, transfer of sponsorship, probationary accreditation, withhold of accreditation, or withdrawal of accreditation.

The decision of the CAAHEP Board of Directors is provided in writing to the sponsor immediately following the CAAHEP meeting at which the program was reviewed and voted upon.

2. Before the ARC/STSA forwards a recommendation to CAAHEP that a program be placed on probationary accreditation, the sponsor must have the opportunity to request reconsideration of that recommendation or to request voluntary withdrawal of accreditation. The ARC/STSA’s reconsideration of a recommendation for probationary accreditation must be based on conditions existing both when the committee arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors’ decision to confer probationary accreditation is not subject to appeal.

3. Before the ARC/STSA forwards a recommendation to CAAHEP that a program’s accreditation be withdrawn or that accreditation be withheld, the sponsor must have the opportunity to request reconsideration of the recommendation, or to request voluntary withdrawal of accreditation or withdrawal of the accreditation application, whichever is applicable. The ARC/STSA’s reconsideration of a recommendation of withdraw or withhold accreditation must be based on conditions existing both when the ARC/STSA arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors' decision to withdraw or withhold accreditation may be appealed. A copy of the CAAHEP "Appeal of Adverse Accreditation Actions" is enclosed with the CAAHEP letter notifying the sponsor of either of these actions.

At the completion of due process, when accreditation is withheld or withdrawn, the sponsor's Chief Executive Officer is provided with a statement of each deficiency. Programs are eligible to re-apply for accreditation once the sponsor believes that the program is in compliance with the accreditation Standards.

**Note: Any student who completes a program that was accredited by CAAHEP at any time during his/her matriculation is deemed by CAAHEP to be a graduate of a CAAHEP-accredited program.**

## **APPENDIX B**

### **Curriculum for Educational Programs in Surgical Technology**

#### **1. Healthcare Sciences**

##### **a. Medical Terminology**

- 1) Combine prefixes, word roots, and suffixes to create medical terms.
- 2) Pronounce medical terms.
- 3) Write medical terms.
- 4) Identify abbreviations.

##### **b. Anatomy and Physiology**

- 1) Identify the basic organizational structures of the human body, including body planes, general organization, and terms of reference.
- 2) Analyze the basic structure of cells and relate cellular components to integrated cell function.
- 3) Analyze the types of tissue that make up organs and the characteristics of each.
- 4) Compare and contrast organs of the body.
- 5) Analyze the different body systems for composition and function.

##### **c. Microbiology**

- 1) Correlate the impact of microbiology in relationship to the practice of sterile technique and infection control in the operative setting.
- 2) Identify the name and function of various parts of the compound microscope.
- 3) Compare and contrast the structure and characteristics of different microorganisms.
- 4) Analyze the various immune responses that occur in the body as defenses against invasion by pathogens.
- 5) Relate the infectious process to surgical practice.

##### **d. Pathophysiology**

- 1) Relate pathophysiology to surgical interventions.
- 2) Analyze the relationship between cell pathology and disease.
- 3) Examine hemodynamic disorders, inflammation, and infection.
- 4) Compare and contrast the various surgical pathologies of each body system.

##### **e. Pharmacology and Anesthesia**

- 1) Analyze the principles of anesthesia administration.
- 2) Compare and contrast methods, agents, and techniques of anesthesia administration and preparation.
- 3) Define patient monitoring devices and their application during anesthesia administration.
- 4) Correlate anesthesia monitoring devices with patient homeostasis.
- 5) Explain anesthesia complications and interventions.
- 6) Define and calculate medication conversions and dosages.
- 7) Apply general terminology to medication uses.
- 8) Prepare and manage medications and solutions.
- 9) Use medications in the care of the surgical patient.

## 2. Professional Practice

- a. Professionalism
  - 1) Communication Skills
    - a) Didactic:
      - i. Define and describe types of communication relationships.
      - ii. Discuss goals of communication.
      - iii. Describe the significance of content and tone in communication.
    - b) Skill Applications:
      - i. Demonstrate principles of communication in the surgical setting.
      - ii. Demonstrate body language and non-verbal communication.
  - 2) Conflict Resolution
    - a) Identify the skills necessary to resolve conflict in the workplace.
    - b) Distinguish the types of behavioral concerns found in society.
    - c) Discuss the strategies to negotiate effective problem resolution.
    - d) Evaluate the methods to prevent conflict in the surgical arena.
  - 3) Employability Skills
    - a) Didactic:
      - i. Assess employment opportunities for the surgical technologist.
      - ii. Evaluate personal employability qualities and develop an employment strategy that includes positive characteristics.
      - iii. Compare and contrast various types of employment/applications and follow-up correspondence.
      - iv. Analyze various interview strategies.
      - v. Compare and contrast the various roles in the surgical technology profession.
    - b) Skill Applications:
      - i. Develop a plan of action to secure employment in the healthcare field.
      - ii. Develop a professional resume.
      - iii. Demonstrate responsible and accountable behavior within the role and competencies of the surgical technologist.
  - 4) Ethical and Moral Issues
    - a) Didactic:
      - i. Review the American Hospital Association's (AHA) Patient Care Partnership
      - ii. Understand the influence of ethics in professional practice.
      - iii. Discuss the role of morality during ethical decision making.
      - iv. Discuss examples of ethical situations and problems in the health professions.
      - v. Demonstrate the key elements related to developing a surgical conscience.
      - vi. Review principles of problem solving in ethical decision making.
      - vii. Discuss principles of patient confidentiality including verbal and written.
    - b) Skill Applications:
      - i. Demonstrate the key elements related to developing a surgical conscience.

- 5) Legal Issues
  - a) Analyze the concepts of law.
  - b) Define the various types of legal doctrines.
  - c) Discuss the concepts that influence the standards of conduct.
  - d) Analyze the legal elements of proper documentation.
  - e) Describe the types of sentinel events.
  - f) Summarize the intentions of risk management.
  
- 6) Management and Leadership
  - a) Identify the characteristics of a successful leader.
  - b) Discuss the functions and roles of leadership.
  - c) Understand diverse styles of management theory.
  - d) Explore pathways to advance in management roles.
  
- 7) Teamwork
  - a) Didactic:
    - i. Discuss methods for successful surgical team participation.
    - ii. Discuss strategies for the attainment of effective team goals.
    - iii. Compare and contrast individual skills vs. collaboration roles and responsibilities.
  
  - b) Skill Applications:
    - i. Demonstrate principles of teamwork in the surgical environment.
  
- b. Healthcare facility information
  - 1) All-hazards
    - a) Describe the types of disasters or public health emergencies.
    - b) Discuss the effects of emerging infectious diseases.
    - c) Describe the effect disasters can have on the environment.
    - d) Describe how healthcare facilities can manage waste.
    - e) Describe the purpose and coordination of the all-hazards systems including the hospital incident command system, national incident management systems, and national response framework.
    - f) Describe the components of a healthcare facility emergency operations plan.
    - g) Explain the personal and professional responsibilities of healthcare workers when participating in the management of a disaster or hazard.
    - h) Describe how to mitigate casualties according to specific types of hazards.
    - i) Describe the four responses that apply to every type of disaster.
    - j) Describe the triage procedures.
    - k) Describe the role of the surgical technologist during triage.
    - l) Describe the processes used to control contamination.
    - m) Describe the support roles of the surgical technologist.
    - n) Discuss the moral and ethical issues relevant to hazards.
  
  - 2) HCF Organization and Management
    - a) Compare the different roles of the team members in the surgical setting.
    - b) Identify the proper chain of command in the operating room.
    - c) Describe the health care facility departments that provide direct and indirect patient care.
    - d) Describe the healthcare agencies that impact the provision of surgical services.

- 3) Physical Environment
  - a) Discuss location of the surgical services within the healthcare facility.
  - b) Describe basic floor plan designs for surgical services.
  - c) Explain the principles underlying the design of the surgical department.
  - d) Describe the floor plan of the operating room.
  - e) Summarize the components that comprise the environmental systems.
  - f) Describe the principles of environmental system safety controls.
- c. Biopsychosocial concepts
  - 1) Death and Dying
    - a) Evaluate perceptions regarding death and dying.
    - b) Define the various causes of death.
    - c) Discuss the definitions of death.
    - d) Compare and contrast responses to the process of death.
    - e) Evaluate the various coping strategies and mechanisms.
    - f) Analyze quality vs. quantity of life.
    - g) Evaluate the process when a patient death occurs in the operating room.
    - h) Discuss the issues regarding organ and tissue recovery from deceased individual.
    - i) Discuss the issues related to suicide.
  - 2) Needs of the Patient
    - a) Evaluate the holistic needs of the surgical patient.
    - b) Identify responses in relation to the needs of the patient population.
    - c) Discuss the needs of susceptible populations.
3. **Technological Science Concept**
  - a. Information technology
    - 1) Describe the basic components of a computer system.
    - 2) Evaluate basic electronic medical records (EMR) systems used.
    - 3) Evaluate safe practices for implementing information technology.
    - 4) Describe best practices in securing protected health information (PHI).
  - b. Electricity
    - 1) Didactic:
      - a) Define terminology.
      - b) Describe the principles of electrical flow.
      - c) Describe the various components of the electrosurgical unit.
    - 2) Skill Applications:
      - a) Demonstrate electrical safety.
      - b) Demonstrate knowledge of operating the electrosurgical unit.
  - c. Lasers
    - 1) Describe the biophysics of lasers.
    - 2) Discuss the advantages of using lasers.
    - 3) Describe the types of lasers.
    - 4) Describe the specific applications of each type of laser.
    - 5) Demonstrate proper care and handling of surgical lasers.
    - 6) Demonstrate patient and healthcare provider safety in relationship to lasers in a surgical setting.

- d. Minimally Invasive Applications
  - 1) Discuss the applications of each type of minimally invasive surgery (MIS) system.
  - 2) Discuss the advantages of each type of MIS system.
  - 3) Discuss the risks associated with the use of each type of MIS system.
  - 4) Discuss the components of minimally invasive systems.
- e. Interventional Radiology
  - 1) Describe the purpose of interventional radiology (IR).
  - 2) Discuss the considerations for the use of IR.
  - 3) Describe imaging modalities.
  - 4) Evaluate the role of the surgical technologist.

#### 4. Surgical Technology

- a. Equipment
  - 1) Didactic:
    - a) Identify the purposes of the various types of equipment.
    - b) Review the uses of the various types of equipment.
    - c) Describe the perioperative handling of equipment.
  - 2) Skill Applications:
    - a) Demonstrate the assembly of various types of equipment.
    - b) Demonstrate the use of various types of equipment.
    - c) Demonstrate the care of various types of equipment.
- b. Instrumentation
  - 1) Didactic:
    - a) Identify the manufacturing characteristics of surgical instruments.
    - b) Compare the grades of surgical instruments.
    - c) Describe the categories of surgical instruments.
    - d) Apply knowledge of surgical instrumentation to specific surgical specialties.
    - e) Evaluate perioperative instrumentation handling concepts.
  - 2) Skill Applications:
    - a) Demonstrate perioperative instrument handling.
    - b) Demonstrate proper transport of instrumentation.
- c. Supplies
  - 1) Didactic:
    - a) Identify surgical supplies.
    - b) Explain the usage of surgical supplies.
    - c) Explain the principles of handling the various types of surgical supplies.
    - d) Evaluate selection of surgical supplies.
  - 2) Skill Applications:
    - a) Demonstrate the role of the surgical technologist in the application of surgical supplies.
- d. Asepsis and Sterile Technique
  - 1) Didactic:
    - a) Define and describe the terms related to asepsis and sterile technique.

- b) Apply concepts related to asepsis.
  - c) Evaluate sources of contamination.
  - d) Discuss principles and practices of sterile technique.
- 2) Skill Applications:
- a) Demonstrate proper sterile technique.
- e. Sterile Processing
- 1) Didactic:
- a) Define terms related to sterile processing.
  - b) Describe the processes of decontamination.
  - c) Describe the manual methods used for cleaning of surgical instrumentation and equipment.
  - d) Describe the mechanical methods used for cleaning.
  - e) Describe the concepts of disinfection.
  - f) Discuss the principles related to preparing items for sterilization.
  - g) Analyze the requirements for sterilizing items.
  - h) Discuss the principles of sterile storage.
  - i) Discuss the principles of distributing sterile supplies.
- 2) Skill Applications:
- a) Demonstrate point-of-use cleaning methods.
  - b) Demonstrate use of various types of sterilization machines.
  - c) Demonstrate proper technique in storing, handling, and distributing sterile supplies.
- f. Perioperative Case Management
- 1) Preoperative
- a) Surgical Attire
    - i. Didactic:
      - i.) Identify select types of surgical attire.
      - ii.) Describe the purposes of surgical attire.
      - iii.) Identify the types of accessory attire.
      - iv.) Discuss restrictions involving surgical attire.
    - ii. Skill Applications:
      - i.) Demonstrate the principles involved in donning or doffing surgical attire.
  - b) Establishing the Sterile Field
    - i. Didactic:
      - i.) Describe the principles associated with establishing the sterile field.
      - ii.) Explain the steps for preparing an operating room.
      - iii.) Describe the use of the surgeon's preference card.
      - iv.) Describe the concepts that are applied for opening sterile items.
      - v.) Explain the sequence of opening sterile supplies.
      - vi.) Explain the steps for organizing the back table.
      - vii.) Explain the steps for organizing the Mayo stand.
      - viii.) Describe the final steps required to finish establishing the sterile field.
      - ix.) Analyze special circumstances that require adjusting the normal routine for establishing the sterile field.

- ii. Skill Applications:
  - i.) Demonstrate opening sterile supplies.
  - ii.) Demonstrate the procedure to correct contaminations during the opening process.
  - iii.) Demonstrate the process of organizing the sterile field.
  - iv.) Demonstrate the principles of economy of motion
  - v.) Demonstrate the principles of spatial awareness when organizing the sterile field.
  - vi.) Demonstrate the finalization of the sterile field.
  - vii.) Demonstrate modifications to setting up the sterile field that must be taken when a special circumstance occurs.
  
- c) Hand Hygiene and Surgical Scrub
  - i. Didactic:
    - i.) Describe the considerations that are important to maintaining hand and skin integrity.
    - ii.) Discuss the concepts for performing the medical hand wash.
    - iii.) Discuss the concepts of the surgical scrub as related to infection control.
  
  - ii. Skill Applications:
    - i.) Demonstrate the steps of a medical hand wash.
    - ii.) Demonstrate the steps for preparing to complete a surgical scrub.
    - iii.) Demonstrate the steps of performing a surgical scrub.
  
- d) Gowning and Gloving
  - i. Didactic:
    - i.) Describe the types of surgical gowns and gloves.
    - ii.) Describe the factors that affect the selection process.
    - iii.) Describe the methods of gowning.
    - iv.) Evaluate each method of gloving.
  
  - ii. Skill Applications:
    - i.) Apply the principles of asepsis to gowning and gloving self.
    - ii.) Apply the principles of asepsis to gowning and gloving other team members.
  
- e) Surgical Counts
  - i. Didactic:
    - i.) Describe the purpose of surgical counts.
    - ii.) Describe the types of documentation.
    - iii.) Identify the items that must be counted.
    - iv.) Describe the methods for counting.
    - v.) Discuss the frequency and timing of surgical counts.
    - vi.) Explain the intraoperative sequence for completing surgical counts.
    - vii.) Identify when additional counts are necessary.
  
  - ii. Skill Applications:
    - i.) Demonstrate the procedure for counting sponges, sharps, instruments, and accessory items on the field.

- f) Draping
  - i. Didactic:
    - i.) Describe the characteristics of draping materials.
    - ii.) Describe the types of draping materials.
    - iii.) Explain the application of drapes to equipment and furniture.
  
    - iv.) Explain the selection of drapes in relation to anatomical regions.
    - v.) Describe the draping sequence as related to surgical procedures.
  - ii. Skill Applications:
    - i.) Demonstrate the principles of asepsis when draping the patient, furniture, and equipment.
- g) Perioperative Documentation
  - i. Didactic:
    - i.) Summarize the purpose of documentation.
    - ii.) Describe the documents found in the surgical patient's chart.
    - iii.) Discuss the purpose of an informed consent.
    - iv.) Describe the types of informed consent.
  - ii. Skill Applications:
    - i.) Demonstrate participation in the *Surgical Safety Checklist* process.
- h) Patient ID and Time-out Procedure
  - i. Didactic:
    - i.) State the purpose of patient identification.
    - ii.) Describe the patient identification procedure according to patient situation.
    - iii.) Describe the purpose of the time-out procedure.
    - iv.) Identify the sequence for the time-out procedure.
    - v.) Recall who will participate in the time-out procedure.
    - vi.) Identify the time-out components.
  - ii. Skill Applications:
    - i.) Participate in the identification process of a surgical patient.
- i) Physical Preparation of the Patient
  - i. Didactic:
    - i.) Describe the physical preparation that the surgical patient may receive prior to the surgical procedure.
    - ii.) Identify methods of patient transport.
    - iii.) Discuss the principles of transporting a patient.
    - iv.) Discuss the principles of transferring a patient.
    - v.) Identify equipment utilized for transferring of the surgical patient.
    - vi.) List the indications for urinary catheterization.
    - vii.) List the items to be taken under consideration when performing urinary catheterization.
    - viii.) List the supplies required to perform urinary catheterization.
    - ix.) Explain the steps for performing urinary catheterization.
    - x.) Discuss the principles of monitoring urine output.

- xi.) Explain the factors to be taken under consideration when the patient position is selected.
- xii.) Identify the sections of the OR table.
- xiii.) Explain the functions of the OR table.
- xiv.) Describe the surgical positions.
  
- xv.) Describe the various types of accessory devices.
- xvi.) Evaluate the uses of accessory devices.
- xvii.) Explain the factors to be taken under consideration to perform the patient skin prep.
- xviii.) Describe the various types of skip prep supplies.
- xix.) Compare different skin prep solutions.
- xx.) Explain the steps for completing a patient skin prep.
  
- ii. Skill Applications:
  - i.) Demonstrate the principles of safe patient transport and transfer.
  - ii.) Demonstrate basic positioning of the surgical patient.
  - iii.) Demonstrate urinary catheterization.
  - iv.) Demonstrate skin preparation.

## 2) Intraoperative

### a) Surgical Incisions and Exposure

- i. Didactic:
  - i.) Identify the anatomy as related to each type of incision.
  - ii.) Distinguish among the various types of incisions.
  - iii.) Identify surgical incision selection based upon proper planning.
  - iv.) Describe the principles of exposure.
  
- ii. Skill Applications:
  - i.) Demonstrate techniques for tissue exposure.

### b) Maintenance of the Sterile Field

- i. Didactic:
  - i.) Discuss the concepts that apply to the maintenance of the sterile field.
  - ii.) Explain the duties of the surgical technologist to maintain the sterile field.
  - iii.) Describe special considerations that require the surgical technologist to adjust maintaining the sterile field.
  
- ii. Skill Applications:
  - i.) Demonstrate sharps safety.
  - ii.) Demonstrate fire safety precautions during the intraoperative surgical phase.
  - iii.) Demonstrate correctly passing instruments.
  - iv.) Demonstrate methods for monitoring the sterile field.
  - v.) Demonstrate performing counts.
  - vi.) Demonstrate transfer of care.
  - vii.) Demonstrate managing medications.
  - viii.) Demonstrate techniques for handling various types of specimens.
  - ix.) Demonstrate handling various types of sponges on the sterile field.
  - x.) Demonstrate application of various types of dressings.

c) Hemostasis

- i. Didactic:
  - i.) Analyze the principles of surgical hemostasis.
  - ii.) Differentiate between various methods of hemostasis.
- ii. Skill Applications:
  - i.) Demonstrate the surgical technologist's role in hemostasis.

d) Wound Management

- i. Didactic:
  - i.) Define terminology related to suture.
  - ii.) Discuss the requirements of suture packaging.
  - iii.) List the desired characteristics of suture materials.
  - iv.) Describe the factors that must be considered when choosing suture material.
  - v.) Explain the characteristics used to classify suture material.
  - vi.) Analyze the characteristics of each type of suture materials.
  - vii.) Describe The characteristics of suture needles.
  - viii.) Identify the factors that must be considered when choosing a suture needle.
  - ix.) Describe the parts of a suture needle.
  - x.) Explain the principles of handling suture needles.
  - xi.) Describe the various types of suture techniques.
  - xii.) Define the types of wound closure.
  - xiii.) Identify the factors that must be considered when selecting the type of needle holder.
  - xiv.) Describe the techniques for cutting suture material.
  - xv.) Summarize the skin closure techniques.
  - xvi.) Describe the various types of wound closure accessories.
  - xvii.) Define the terminology related to wound healing.
  - xviii.) Describe the various types of wounds.
  - xix.) Analyze the mechanisms of wound healing.
  - xx.) Evaluate the classification of surgical wounds.
  - xxi.) Analyze the factors that influence wound healing.
  - xxii.) Describe the complications that interrupt normal wound healing.
- ii. Skill Applications:
  - i.) Demonstrate proper suture selection, preparation, handling, and cutting techniques.
  - ii.) Demonstrate proper placement, handling, loading, and disposal of surgical needles.
  - iii.) Demonstrate the application of the principles of asepsis to basic wound care techniques.

e) Specimen Care

- i. Didactic:
  - i.) Describe specimen types.
  - ii.) Discuss methods of obtaining specimens.
  - iii.) Identify specimen collection containers.

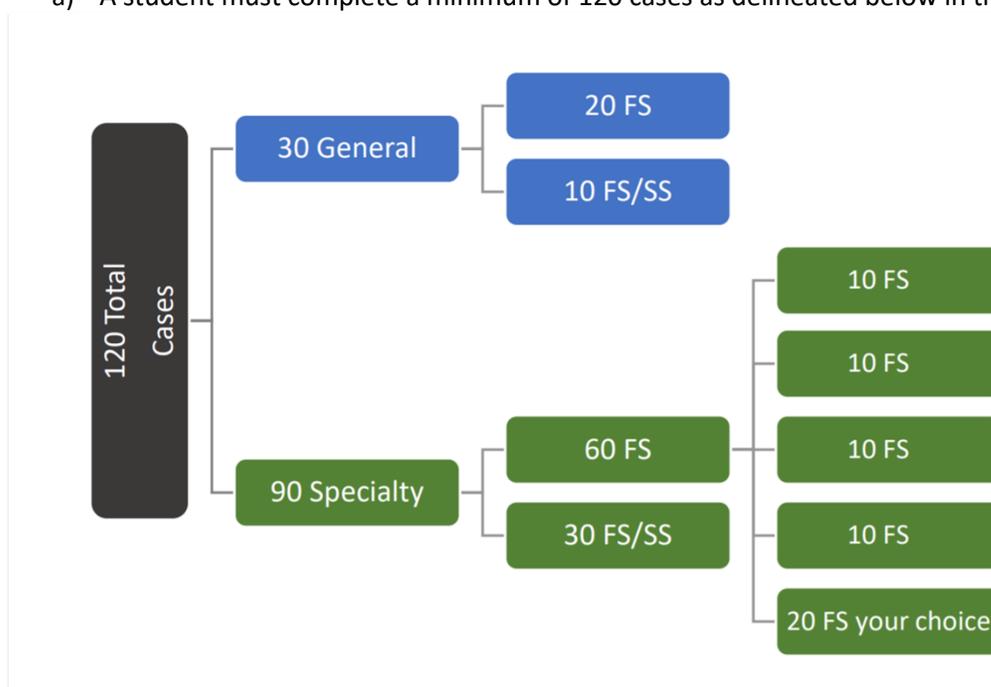
- iv.) Describe the procedures for handling transfer of specimens.
    - v.) List required labeling components.
    - vi.) Discuss the procedure for managing a specimen incident.
  - ii. Skill Applications:
    - i.) Demonstrate specimen handling and the validation process.
- 3) Postoperative
  - a) Application of Dressings
    - i. Didactic:
      - i.) Describe the types of surgical dressings.
      - ii.) Evaluate the functions of surgical dressings.
    - ii. Skill Applications:
      - i.) Demonstrate the preparation of surgical dressings.
      - ii.) Demonstrate the application of surgical dressings.
  - b) Breakdown of the Sterile Field
    - i. Didactic:
      - i.) Discuss the concepts for the breakdown of the sterile field.
      - ii.) Explain the steps that are taken to breakdown the sterile field.
    - ii. Skill Applications:
      - i.) Demonstrate the breakdown of the sterile field.
  - c) PACU
    - i. Analyze the postoperative care of the surgical patient.
    - ii. Describe potential surgical patient complications.
    - iii. Describe the assistive role of the surgical technologist.
    - iv. Describe equipment and supplies.
    - v. Discuss the criteria for patient discharge.
  - d) Disinfection of the Surgical Environment
    - i. Didactic:
      - i.) Describe the purpose of disinfection of the surgical environment.
      - ii.) Describe the cleaning process utilizing disinfecting agents.
      - iii.) Describe disinfecting agents.
    - ii. Skill Applications:
      - i.) Demonstrate disinfection of the surgical environment.
- g. Assistant Circulator Duties
  - 1) Didactic:
    - a) Discuss the perioperative duties of the assistant circulator.
  - 2) Skill Applications:
    - a) Demonstrate the perioperative duties of the assistant circulator to include documentation.
- h. Surgical Procedures by Specialty
  - 1) Didactic

- a) Apply medical terminology as it relates to each procedure.
- b) Compare and contrast the approach for each procedure.
- c) Review the anatomy and physiology for each procedure.
- d) Discuss the diagnostic procedures and pathology used to obtain a diagnosis.
- e) Describe preoperative patient preparation and considerations for each procedure.
- f) Discuss the operative sequence for each procedure.
- g) Recognize the necessary supplies, instrumentation, and equipment for each procedure.
- h) Evaluate the use of medications for each procedure.
- i) Identify the wound classifications for each procedure.
- j) Discuss postoperative care, considerations, and potential complications for the surgical patient.

i. Surgical Rotation and Roles

1) Surgical Rotation Case Requirements.

- a) A student must complete a minimum of 120 cases as delineated below in the diagram.



2) First and Second Scrub Role and Observation.

a) First Scrub Role (FS)

- i. To document a case in the First Scrub (FS) role, the student shall perform the following duties during any given surgical procedure with proficiency:
  - i.) Verify supplies and equipment
  - ii.) Set up the sterile field
    - 1. Instruments
    - 2. Medication
    - 3. Supplies
  - iii.) Perform required operative counts
    - 1. AST guidelines
    - 2. Facility policy

- iv.) Pass instruments and supplies
    - 1. Anticipate needs
  - v.) Maintain sterile technique
    - 1. Recognize sterility breaks
    - 2. Correct sterility breaks
    - 3. Document as needed
- b) Second Scrub Role (SS)
- i. The SS role is defined as a student who has not met all the criteria for the FS role, but actively participates in the surgical procedure in its entirety by completing any of the following:
    - i.) Assistance with diagnostic endoscopy
    - ii.) Assistance with vaginal delivery
    - iii.) Cutting suture
    - iv.) Providing camera assistance
    - v.) Retracting
    - vi.) Sponging
    - vii.) Suctioning
- c) Observation Role (O)
- i. The O role is defined as a student who has not met criteria for the FS or SS role. The student is observing a case in either the sterile or nonsterile role. Observation cases cannot be applied to the required 120 case count but must be documented.