

***This is a SouthArk Master Syllabus. The course syllabus distributed by the instructor may include additional requirements, must be followed by the student in the given term, and is considered to supersede the Master Syllabus.***

**Course Number**  
SURG 1106

**Course Title**  
Fundamentals of Surgical Technology

**Course Description**

This course introduces the student to the fundamentals of surgical technology. Topics included but not limited to are the physical environment of the surgical suite; roles of the surgical team including the surgical technologist; basic skills needed to meet physical, spiritual, and psychological needs of the surgical patient; asepsis including preparation, sterilization, and disinfection of supplies used in surgery; and basic case preparation, including creation and maintenance of the sterile field, draping principles, instrumentation, sutures, OR furniture and supplies, specialty equipment; and safety in the surgical environment.

**College Mission**

South Arkansas Community College promotes excellence in learning, teaching, and service; provides lifelong educational opportunities; and serves as a cultural, intellectual, and economic resource for the community.

**College Wide Student Learner Outcomes**

Critical Thinking                      Responsibility                      Communication

**ACTS Course**                       **Program Course**                       Surgical Technology

**ACTS Outcomes**

**Program Outcomes**

1. Collaborate professionally with patients, their significant others and with all members of the healthcare team (Affective).
2. Promote interest, pride, and concern in the well-being of the community and its citizens through their contributions as surgical technologists (Cognitive, Affective, Psychomotor).
3. Practice clear effective communication skills, both written and non-written (Psychomotor, Affective).
4. Facilitate a teamwork atmosphere, that is responsive to and centers on the surgical patient's needs (Cognitive, Affective, Psychomotor).
5. Examine and incorporate the Association of Surgical Technologist scope of practice guidelines, rules, regulations, and ethical standards in the practice of surgical technology (Cognitive, Affective).
6. Demonstrate proficiency of learned scientific principles and integrate these concepts in the practice of safe competent care for the consumer (Cognitive, Affective, Psychomotor).
7. Prepare competent entry-level surgical technologist in the cognitive, psychomotor, and affective learning domains.
8. Support professional certification and life-long learning through continuing education to improve knowledge and skills performance (Cognitive, Affective, Psychomotor).

**Course Outcomes**

CLO #	Course Outcomes	Unit Outcomes/ Competencies	ACTS	Program Outcomes	Critical Thinking	Communication	Responsibility	Assessment
CLO 1	Distinguish key elements related to anatomy and physiology, microbiology, and the mechanisms of wound healing and wound complications, as it relates to surgical care.[Cognitive – Knowledge, comprehension, and analysis]	23-27		4-7			R-2	Practicum I Evaluation Tool: 2, 5, 8, 11, 13, 15, 17, 19

								Fundamental s Skills Lab
CLO 2	Displays appropriate key elements of standard precautions and infection control measures. [Cognitive – Knowledge, comprehension, and application. Psychomotor – Utilizing imitation, manipulation following oral or written directions and finally precision (independent performance)]	1-11, 23- 55, 68-78		5,6, 7			R-2	Practicum I Evaluation Tool: 8, 11, 13, 15, 17, 18, 19 Fundamental s Skills Lab
CLO 3	Assess safety hazards and appropriate interventions regarding patient and environmental safety including specimen care, counts, electrical, radiation and laser precautions, CDC (Infection Control measures), latex allergy, and OSHA (PPE) requirements. [Cognitive – Knowledge, comprehension, and analysis.]	1- 67, 79-98		5,6, 7			R-2	Practicum I Evaluation Tool: 4, 8, 11, 13, 15, 17, 18, 19 Fundamental s Skills Lab
CLO 4	Considers the principles of surgical fundamentals such as aseptic technique, storage and handling of sterile supplies, sterilization and disinfection efficiently and safely. [Cognitive–Knowledge, comprehension, and evaluation].	1-11, 23- 55, 68-78,		1,2, 4,5, 6,7		CT 1		Practicum I Evaluation Tool: 4-19 Fundamental s Skills Lab
CLO 5	Recommend appropriate action when confronted with equipment-related complications, surgical complications, or emergencies and responds appropriately in lab or clinical setting. [Cognitive-Knowledge, comprehension, and evaluation. Psychomotor – precision as appropriate in the lab setting; manipulation following verbal instructions in the clinical setting.]	12- 27, 79-98		4,5, 6,7		CT 1		Practicum I Evaluation Tool: 3, 10, 13, 21, 22 Fundamental s Skills Lab
CLO 6	Formulate procedural steps and simulates performance (independent) of patient care procedures correctly and safely such as skin preparation, positioning, draping, catheterization, vital signs, and cardiopulmonary resuscitation. [Cognitive- Knowledge and application. Psychomotor – Utilizing imitation, manipulation following oral or written directions and finally precision (independent performance).]	20-37, 56-78,		1-7		CT 1		Practicum I Evaluation Tool: 1-23 Fundamental s Skills Lab
CLO 7	Considers basic steps, possible variations, and principles of surgical technique and planning to patients of all ages and physical conditions for a variety of procedures by formulating or modifying the patient's case plan. [Cognitive – Knowledge, comprehension, and application. Affective – Responding, receiving, and valuing.]	79-98		1-7	C-2			Practicum I Evaluation Tool: 1-23 Fundamental s Skills Lab

### Unit Outcomes/ Competencies

1. Discuss location of the surgical services within the healthcare facility.
2. Describe basic floor plan designs for surgical services.
3. Describe an optimal location of an operating room.
4. Describe the floor plan of the operating room.
5. Describe the environmental systems and controls within the operative environment.
6. State the proper ranges for temperature and humidity controls.
7. Describe the various components of the operating room ventilations system.
8. Acknowledge the proper chain of command in the operating room.
9. Compare and contrast health care facility departments that relate to direct and indirect patient care in surgical services.
10. Describe disasters or public health emergencies that impact public health including the different types along with the general health, safety and security risks.

11. Describe the all-hazards framework.
12. Explain key components of personal, family, institutional, community and regional disaster preparation and planning.
13. Describe communication strategies and procedures used in a disaster including barriers to communicating and disseminating health information, reporting systems and procedures for contacting family, coworkers, and local authorities.
14. Describe the purpose & relevance of disaster support services including rationale for integration and coordination of all systems.
15. Describe the potential impact of mass casualties on the clinical and public health resources including infection control precautions, personal protective equipment, and decontamination procedures.
16. Explain the role of triage as a basis for prioritizing or rationing health care services for victims.
17. Describe the possible medical and mental health consequences, interventions, and solutions for managing those affected including the psychological, cultural, religious, and forensic considerations for management of mass fatalities and the resources, supplies and services available.
18. Explain both the basic life-saving and life-support principles and procedures that can be used at a disaster scene.
19. Describe issues relevant to the management of individuals of all ages, populations, and communities affected by a disaster or public health emergency.
20. Describe the principles of the environmental safety controls and guidelines.
21. Discuss the potential hazards in the operating room environment.
22. Employ the principles of body mechanics when transferring the surgical patient.
23. Correlate the impact of microbiology in relationship to the practice of sterile technique and infection control in the operative setting.
24. Identify the name and function of various parts of the compound microscope.
25. Compare and contrast the structure and characteristics of different microorganisms.
26. Analyze the various immune response that occur in the body as defenses against invasion by pathogens.
27. Relate the infectious process to surgical practice.
28. Apply terms related to asepsis.
29. Discuss sources of contamination.
30. Demonstrate sterile technique.
31. Demonstrate the steps of a hand wash.
32. Identify the preliminary preparations for the surgical scrub.
33. Demonstrate the steps of the surgical scrub.
34. Employ sterile technique during the surgical scrub.
35. Recognize appropriate surgical attire.
36. Employ principles involved in donning surgical attire.
37. Employ sterile technique when gowning and gloving self and when assisting other team members.
38. Define terms related to the terminal disinfection/sterilization process.
39. Identify the methods of processing items during terminal disinfection and/or sterilization.
40. Identify the concepts of microbial barriers.
41. Compare and contrast the materials used for creating microbial barriers.
42. List the methods for sealing microbial barriers.
43. List the process for preparing items for sterilization.
44. Identify variables related to the sterilization process and the materials to be processed.
45. Compare and contrast methods of sterilization.
46. Identify process monitoring devices and methods.
47. Identify systems used for sterile storage.
48. Apply principles of sterile storage to handling of sterile supplies.
49. Compare and contrast shelf life and event related sterility.
50. Assess distribution systems used by sterile processing departments.
51. Demonstrate proper technique in storing, handling, and distributing sterile supplies.
52. Demonstrate awareness of improper handling and use of sterile supplies.
53. Perform decontamination of the OR environment.
54. Analyze the factors and variables of disinfecting agents.
55. Compare and contrast disinfecting agents.
56. Describe and perform the physical preparation and care that the surgical patient may receive prior to the surgical procedure.
57. Evaluate the items on the pre-operative patient checklist.
58. State the purpose of proper identification.
59. Demonstrate the identification process for a surgical patient admitted to the surgical suite.
60. Identify methods of patient transportation.

61. Discuss the factors related to the family members and transportation of the patient.
62. Demonstrate the principles of safe transportation.
63. Discuss methods of patient transfer.
64. Identify equipment utilized for safe transfer of the surgical patient.
65. Analyze the use, components, and aides utilized to achieve various surgical positions.
66. Detail the sections and functions of the OR table.
67. Perform basic positioning.
68. List the indications for urinary catheterization.
69. Discuss the basic considerations for urinary catheterization.
70. List the supplies required to perform urinary catheterization.
71. Demonstrate urinary catheterization.
72. Discuss the principles of monitoring urine output.
73. Compare and contrast different types of skin preparation.
74. Compare and contrast different chemical agents used for skin preparation.
75. Describe the steps and rationales for surgical skin preparation.
76. Describe various types of draping material used in surgical procedures.
77. Select the appropriate drapes for specific positions and surgical procedures.
78. Demonstrate the aseptic principles of draping the patient, equipment, and furniture.
79. Demonstrate methods utilized to analyze and plan for the needs of the surgical case.
80. Select the instruments, supplies and equipment needed for a surgical procedure.
81. Describe the function of the physical components of the operating room.
82. Demonstrate the arrangement, care, handling and assembly of operating room furniture and equipment.
83. Describe the use of instruments and supplies.
84. Demonstrate techniques for preparing the sterile field.
85. Explain the procedures for draping furniture and equipment for use on the sterile field.
86. Explain methods for monitoring the sterile field.
87. Apply the principles of asepsis to the practice of sterile technique.
88. Assess and anticipate the needs of the surgical team.
89. Integrate variations of case management according to the surgical procedure.
90. Demonstrate postoperative case management duties in an organized manner.
91. Apply standard precautions to the performance of perioperative case management activities.
92. Assess the function, assembly, use and care of equipment in the surgical environment.
93. Describe the application of surgical equipment.
94. Discuss the purposes and legal responsibilities of counts.
95. Describe the techniques used to prevent foreign body retention.
96. Discuss when counts should be performed.
97. Describe the methods for counting.
98. Demonstrate the procedure for counting instruments, sponges, sponges, sharps and other items on the field.

### **Assessment Description(s)**

Student will be evaluated through assignments, quizzes, exams as well as in the laboratory setting based on skills performance and given a percentage grade based on each skill check-off and all other assignments given in the lab.

Student will be evaluated in the clinical setting based on skills performance.

### **Materials and Technological Requirements**

Surgical Technology: Principles and Practice; Fuller 6th Edition; Elsevier  
 Surgical Technology: Principles and Practice Work Book; Fuller 6th Edition; Elsevier  
 Alexander's Care of The Patient in Surgery; 15th Edition; Elsevier  
 Differentiating Surgical Equipment and Supplies; 2nd Edition; F.A. Davis  
 Differentiating Surgical Instruments; 2nd Edition; F.A. Davis

### **Class Attendance Policy**

Students are expected to attend all classes in which they are enrolled. If a student is absent from a class session, it is the student's responsibility to make arrangements to complete or make up any work missed. No make-up work for missed classes will be allowed without the approval of the instructor. Students who enroll late must assume all responsibility for work missed. Classes not attended as a result of late enrollment may be counted toward excessive absences. Students not attending the entire class period may be counted absent for that period. An instructor may drop students with a grade of "WE" if students have been absent for an excessive number of days. Warning letters will

be sent to the students advising them of the consequences of nonattendance and urging them to contact their instructors immediately. Excessive absences are defined as follows:

### **Regular Semester**

Courses which meet once a week .....	2 absences
Courses that meet twice per week .....	3 absences
Courses that meet four times per week .....	5 absences

### **Summer Session**

Courses that meet four times per week in a five week session .....	3 absences
Courses which meet two evenings per week in a 10 week session .....	3 absences

Students enrolled in special programs or individualized instruction should contact their program director/instructor regarding specific attendance requirements for the program/course. Some of the selective-admission, health-science programs have specific criteria regarding attendance. Students are encouraged to refer to program policies in these matters.

### Jury Duty/Military/Official School Function

Scheduled absences are those that occur due to college-related activities or as a result of summons to jury duty or military duty. Classes missed as a result of scheduled absences will not be counted as excessive absences if the instructor is notified and provided documentation prior to the absence(s). Make-up work for scheduled absences will be at the discretion of the instructor.

In all instances, documentation must be provided to the instructor within 24 hours of receipt. Documentation should come from an appropriate party on letterhead or other official stationery with a signature and contact information. Documentation should list the corresponding dates of the leave.

### Medical leave

For medical-related absences, documentation must include written notice from the treating medical professional documenting time needed off related to medical reasons and time student may resume classes. The medical reason does not need to be listed on the documentation; the documentation must include only that there is a medical reason, the amount of time the student needs to be absent, and the time the student should be able to return to classes. Students who elect to work at home while on excused leave must meet with their instructors to make arrangements to do so. Working on coursework while on medical leave is not a requirement but can be requested by students. If students request that they be allowed to work at home while on an excused leave, the instructor will make every reasonable effort to ensure that the student is able to do so.

For students who have a medical condition necessitating time off or accommodation:

- 1) They may work at home on assignments if they choose to if on medical leave approved by a medical professional
- 2) Receive appropriate accommodations related to coursework (i.e., excused from labs with potentially harmful chemicals, have a larger desk, etc.)
- 3) Resume their studies where they left off once they return to classes
- 4) Be allowed to make up any missed work related to medical leave
- 5) Receive incompletes on their transcripts until coursework is completed, according to the incomplete grade contract.
- 6) Be given a reasonable time frame in which to complete missed coursework

### **Academic Honesty Policy**

Students enrolled at South Arkansas Community College are expected at all times to uphold standards of integrity. Students are expected to perform honestly and to work in every way possible to eliminate academic dishonesty. Academic dishonesty includes cheating and plagiarism, which are defined as follows:

- Cheating is an attempt to deceive the instructor in his/her effort to evaluate fairly an academic exercise. Cheating includes copying another student's homework, class work, or required project (in whole or in part) and/or presenting another's work as the student's own. Cheating also includes giving, receiving, offering, and/or soliciting information on a quiz, test, or examination.
- Plagiarism is the copying of any published work such as books, magazines, audiovisual programs, electronic media, and films or copying the theme or manuscript of another student. It is plagiarism when one uses direct quotations without proper credit or when one uses the ideas of another without giving proper credit. When three or more consecutive words are borrowed, the borrowing should be recognized by the use of quotation marks and proper parenthetical and bibliographic notations.

If, upon investigation, the instructor determines that the student is guilty of cheating or plagiarism, the following penalties will apply:

- The student will receive a penalty of no less than a zero on the work in question.
- The instructor will submit a written report of the incident to the Vice President for Learning
- The Vice President for Learning will determine whether further disciplinary action will be taken.
- All decisions may be appealed for review through the college's Academic Appeals procedure.

### **Equal Opportunity-Affirmative Action Statement**

South Arkansas Community College does not discriminate on the basis of age, race, color, creed, gender, religion, marital status, veteran's status, national origin, disability, or sexual orientation in making decisions regarding employment, student admission, or other functions, operations, or activities.

### **Library Services**

Library Homepage: <http://southark.libguides.com/homepage> Library Contact: LibraryStaff@southark.edu or 870.864.7115

### **Procedures to Accommodate Students with Disabilities:**

If you need reasonable accommodations because of a disability, please report this to the Vice President of Student Services with proper documentation. . VPSS Contact: 870.875.7262

### **The Early Alert System**

In an effort to ensure student retention and success, South Arkansas Community College employs an Early Alert System to identify and support at-risk students as soon as possible in a given semester. The intent of Early Alert is to provide this assistance while there is still time to address behaviors or issues that have the potential of preventing students from completing their courses and degree plans. Students referred through the Early Alert System will be required to work on a corrective action plan with their student advising coach and to include attendance accountability and mandatory academic tutoring either in the academic division or in the Testing and Learning Center (TLC).

Once the Student Advising Coach has met with the referred student, and again when the student has met the prescribed corrective actions, the coach will update the Early Alert System so that the instructor is kept informed of the progress in resolving issues.

### **Behavioral Review Team**

At South Arkansas Community College (SouthArk), we are committed to proactive leadership in student wellbeing and campus safety. By focusing on prevention and early intervention with campus situations that involve any person experiencing distress or engaging in harmful or disruptive behaviors, the BRT will serve as the coordinating hub of existing resources to develop intervention and support strategies and offer case management. Students, faculty, staff, and campus guests are encouraged to report any person on campus who is a concern. BRT Contact: 870.875.7262 BRT@southark.edu

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