

Course Code: SUR 231

Course Title: Clinical Theory I

Department: Allied Health

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 51.9998

Repeatability: 0

Credit Hours

Catalog Notation: 1-3-2

Credit Hour Distribution:

Lecture: 1

Lab: 3

Clinical: 0

Total: 2

General Course Information

Catalog Description

Introduction to the surgical environment. Introduction and demonstration of basic clinical skill components needed to participate as a member of the surgical team in actual operating rooms. Offered in Parkland's mock operating room.

General Course Objectives

1. Determine the appropriate surgical attire for different areas of the operating room.
2. Demonstrate correctly and accurately donning of surgical attire.
3. Describe the role of the surgical technologist and other team members.
4. Demonstrate correct usage and describe correct arrangement and identification of routine operating room furniture.
5. Apply terms related to asepsis, environmental contaminations, and decontamination.
6. Discuss sources of contamination.
7. Demonstrate the principles of asepsis during the performance of practical exams.
8. Demonstrate with proficiency the basic skills required to participate as a member of the surgical team during practical exams.
9. Identify and explain uses of surgical wound dressings and sponges.
10. Analyze sharps safety and environmental hazards in the surgical suite.
11. Identify and describe the characteristics, classifications, selection, preparation, and handling of suture and suture needles.
12. Explain the method for counting surgical items to prevent the retention of a foreign body.
13. Discuss the organization of the sterile field and back table for surgical procedures.

Minimum Placement Levels

English	Reading	Math
Credit in ENG 102 with a grade of C or higher	Placement out of CCS 099	Placement out of MAT 060

Prerequisites

Concurrent enrollment in SUR 210

Admission into the Surgical Technology program

Methods of Evaluation

7-8 practical exams, 13-14 quizzes, 7-8 worksheet assignments, 7-8 practical exam online assessments, MindTap instrument assignments.

Instructional Materials and Additional Supplies

Principles and Practice of Surgical Technology textbook, Fuller, Elsevier, current edition

Surgical Instrumentation ebook + MindTap, Cengage, current edition

Pharmacology for the Surgical Technology textbook, Howe and Burton, Elsevier, current edition

Alexander's Surgical Procedures textbook, Rothrock and Alexander, Elsevier, current edition

SUR 231/232 Lab Manual, instructor produced manual

Set of Surgical Scrubs

Platinum Planner Access Code

Course Content

General Learning Outcomes (GLOs)

- Communication: Students will demonstrate the ability to read, write, listen, and speak effectively.
- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
1. Surgical Attire; 2. Standard OR Furniture; 3. Surgical Sponges; 4. Asepsis and Sterile Technique; 5. Medical Hand Wash; 6. Environmental Hazards; 7. Standard Precautions; 8. Week 1 Check-off	1. Recognize appropriate surgical attire. 2. Demonstrate the principles involved in donning and doffing surgical attire. 3. Identify routine OR furniture and describe its function. 4. Identify and explain uses of wound dressings and surgical sponges. 5. Define event-related sterility. 6. Demonstrate verifying the integrity of the package, expiration date, and sterilization indicator when opening sterile supplies. 7. Demonstrate the technique for a medical hand wash. 8. Demonstrate the housekeeping duties performed in preparation for surgery. 9. Discuss the information included on a surgeon's preference card. 10. Select the instruments, supplies, and equipment needed for a surgical procedure. 11. Demonstrate the opening of a back table pack using sterile technique. 12. Demonstrate the opening of a basin set using sterile technique. 13. Demonstrate the opening of a small wrapped package onto a clean surface using sterile technique. 14. Demonstrate the opening of a small wrapped package onto the sterile field. 15. Demonstrate the opening of a peel pack using sterile technique. 16. Demonstrate the opening of an instrument container system using sterile technique. 17. Analyze sharps safety protocols in the prevention of injuries. 18. Explain the purpose and use of Standard Precautions. 19. Describe the term neutral zone and how it is utilized in the operating room. 20. Define cross contamination.	2	8	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
1. Surgical Hand Scrub; 2. Surgical Hand Rub; 3. Dressings and Sponges; 4. Identification of Suture Materials; 5. Self-gowning and Closed Gloving; 6. Dressing Quiz #1; 7. Ear and Nasal Surgical Instruments	1. Explain the purpose of a surgical hand scrub. 2. Identify preliminary preparations for the surgical scrub. 3. Demonstrate a surgical hand scrub following the principles of asepsis. 4. Define the terms transient microorganisms, resident microorganisms, and subungual. 5. Discuss brushless scrub methods. 6. Demonstrate a surgical rub using the appropriate solution. 7. Identify and explain uses of surgical wound dressings and sponges. 8. Demonstrate how to read and understand the information found on the front of a suture packet. 9. Define terminology related to suture. 10. Explain the purpose of sterile gloves and the rationale behind double gloving. 11. Demonstrate the technique for self-gowning, closed gloving, and turning the gown. 12. Demonstrate the drying of the hands and arms following the surgical scrub using sterile technique. 13. Demonstrate the procedure for removing a gown and gloves. 14. Identify and describe the uses of instruments used in ear and nasal surgery. 15. Demonstrate the correct spelling of the instruments according to the manufacturer's name. 16. Recognize and group instruments according to name, size, and function. 17. Explain the most common applications for ear and nasal instrumentation. 18. Correlate and associate ear and nasal instruments with anatomical structures. 19. Handle and pass ear and nasal instruments correctly and safely.	2	8	0
1. Gowning and Gloving the Surgeon; 2. Identification of Suture Materials (continued); 3. Suture Quiz #1; 4. Instrument Quiz #1; 5. Dressing Quiz #2; 6. Practical Exam - Opening Sterile Packages; 7. Nasal and Throat Surgical Instruments	1. Identify and explain the uses of surgical dressings. 2. Identify the name of a suture by the color of the suture box. 3. Demonstrate the correct pronunciation and spelling of sutures. 4. Name the most common absorbable suture. 5. Name the most common non-absorbable suture. 6. Name the most common cardiovascular suture. 7. Demonstrate assisting a team member with drying, gowning, and gloving. 8. Identify and describe the uses of instruments used in nasal and throat surgery. 9. Demonstrate the correct spelling of the instruments according to the manufacturer's name. 10. Recognize and group instruments according to name, size, and function. 11. Explain the most common applications for nasal and throat instrumentation. 12. Correlate and associate nasal and throat instruments with anatomical structures. 13. Handle and pass nasal and throat instruments correctly and safely.	2	4	0
1. Passing Instruments; 2. Applying and Passing Scalpel Blades; 3. Principles of Suture Materials; 4. Sharp Safety and Neutral Zone; 5. Practical Exam - Surgical Hand Scrub; 6. Practical Exam - Self-gowning and Closed Gloving; 7. Practical Exam - Surgical Hand Rub; 8. Suture Quiz #2; 9. Instrument Quiz #2; 10. Orthopedic Surgical Instruments	1. Identify scalpel blades associated with scalpel handles and the uses of each blade. 2. Demonstrate the application and removal of scalpel blades on scalpel handles. 3. Demonstrate knowledge of hand signals. 4. Demonstrate the techniques for handling and passing surgical instruments. 5. Recognize and demonstrate the sequence of clamp, clamp, cut, tie. 6. Implement sharps safety in the passing of surgical instruments. 7. Explain the relationship between instrument type and usage. 8. Identify criteria used to select exposure devices. 9. Analyze sharps safety protocols in the prevention of injuries. 10. Describe the neutral zone and how it is utilized in the operating room. 11. Identify the suture box and the number of packages required to remove from a list of suture.	2	8	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
1. Passing Instruments; 2. Applying and Passing Scalpel Blades; 3. Principles of Suture Materials; 4. Sharp Safety and Neutral Zone; 5. Practical Exam - Surgical Hand Scrub; 6. Practical Exam - Self-gowning and Closed Gloving; 7. Practical Exam - Surgical Hand Rub; 8. Suture Quiz #2; 9. Instrument Quiz #2; 10. Orthopedic Surgical Instruments (cont'd)	12. State the classification of suture from a list of suture. 13. Name the shape of the needle on a cuticular box of suture. 14. Name the shape of the needle on boxes of suture for intestinal and general closure. 15. Organize packages of suture in preparation for a needle count and state the number of needles in the count correctly. 16. Identify and describe the uses of instruments used in orthopedic surgery. 17. Demonstrate the correct spelling of the instruments according to the manufacturer's name. 18. Recognize and group instruments according to name, size, and function. 19. Explain the most common applications for orthopedic instrumentation. 20. Correlate and associate orthopedic instruments with anatomical structures. 21. Handle and pass orthopedic instruments correctly and safely.			
1. Changing Gown and Gloves/Applying Sleeve; 2. Movement in a Sterile Field; 3. Preparing Sponge Sticks; 4. Arranging Suture for Use According to Tissue Type; 5. Draping the Mayo Stand; 6. Practical Exam - Gowning and Gloving the Surgeon; 7. Suture Quiz #3; 8. Instrument Quiz #3; 9. Transmission-based Precautions; 10. Orthopedic Surgical Instruments	1. State the purpose of a sterile sleeve. 2. Demonstrate the application of a sterile sleeve. 3. Demonstrate the removal and reapplication of a contaminated glove. 4. Demonstrate the removal and reapplication of a contaminated gown and gloves. 5. Apply the principles of asepsis to the practice of movement within the sterile field. 6. Discuss sources of contamination. 7. State the purpose of a sponge stick and demonstrate its preparation. 8. Explain when the arrangement of suture is done when preparing the back table for a surgical procedure. 9. List the wound closure layers for a laparotomy. 10. Demonstrate the technique for draping a Mayo stand. 11. Describe the process of infection. 12. Describe the processes for implementing transmission-based precautions. 13. Arrange suture in order of use for select surgical procedures. 14. Explain the methods of monitoring the sterile field. 15. Identify and describe the uses of instruments used in orthopedic surgery. 16. Demonstrate the correct spelling of the instruments according to the manufacturer's name. 17. Recognize and group instruments according to name, size, and function. 18. Explain the most common applications for orthopedic instrumentation. 19. Correlate and associate orthopedic instruments with anatomical structures. 20. Handle and pass orthopedic instruments correctly and safely.	2	4	0
1. Suture Passing; 2. Threading and Passing Free Needles; 3. Loading and Passing a Heaney Needle Holder; 4. Handling and Passing Keith Needles; 5. Cutting Suture Ties; 6. Applying Skin Staples; 7. Surgical Staplers and Clips; 8. Preparing the Back Table; 9. Principles of Suture Materials; 10. Draping the Mayo Stand; 11. Lost and Retained Surgical Items; 12. Practical Examination - Changing Gown and Gloves/Applying Sleeve; 13. Suture Quiz #4; 14. Instrument Quiz #4; 15. Orthopedic Surgical Instruments	1. Describe and demonstrate the use of surgical instruments and supplies intraoperatively. 2. Demonstrate the selection, preparation, and handling of suture. 3. Demonstrate loading and passing a suture ligature for a right-handed individual and a left-handed individual. 4. Demonstrate the passing of a free tie. 5. Demonstrate the preparation of an instrument tie. 6. Demonstrate sharps safety when handling suture needles. 7. Explain methods of monitoring the sterile field. 8. Discuss the arrangement of supplies on a back table. 9. Discuss the use of the Mayo stand. 10. Analyze and assess the factors that influence the closure of each wound layer. 11. Compare and contrast suture materials, suture sizing, and suture coatings and analyze their significance. 12. Describe the techniques used to prevent foreign body retention.	2	4	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
1. Suture Passing; 2. Threading and Passing Free Needles; 3. Loading and Passing a Heaney Needle Holder; 4. Handling and Passing Keith Needles; 5. Cutting Suture Ties; 6. Applying Skin Staples; 7. Surgical Staplers and Clips; 8. Preparing the Back Table; 9. Principles of Suture Materials; 10. Draping the Mayo Stand; 11. Lost and Retained Surgical Items; 12. Practical Examination - Changing Gown and Gloves/Applying Sleeve; 13. Suture Quiz #4; 14. Instrument Quiz #4; 15. Orthopedic Surgical Instruments (cont'd)	13. Identify surgical staplers and hemostatic clip devices. 14. Demonstrate the draping of the Mayo stand. 15. Demonstrate the organization of the back table. 16. Demonstrate the loading, threading, passing, and reloading of a free needle. 17. Demonstrate the loading and passing of a Heaney needle holder. 18. Demonstrate the loading and passing of a Keith needle. 19. Demonstrate cutting sutures. 20. Demonstrate applying skin staples. 21. Demonstrate cutting ties into 1/4", 1/3", and 1/2". 22. Demonstrate loading and passing Hemoclip applicators. 23. Identify and describe the uses of instruments used in orthopedic surgery. 24. Demonstrate the correct spelling of the instruments according to the manufacturer's name. 25. Recognize and group instruments according to name, size, and function. 26. Explain the most common applications for orthopedic instrumentation. 27. Correlate and associate orthopedic instruments with anatomical structures. 28. Handle and pass orthopedic instruments correctly and safely.			
1. Surgical Counts; 2. Preparing and Handling Medications at the Sterile Field; 3. Practical Exam - Instrument Passing and Applying and Passing Scalpel Blades; 4. Stapler Quiz; 5. Suture Quiz #5; 6. Instrument Quiz #5; 7. Neurosurgery Instruments	1. Discuss the purposes and legal responsibilities of counts. 2. Discuss when counts should be performed. 3. Describe the methods for counting. 4. Indicate the procedures which require sponge, needle/sharps, and instrument counts. 5. Describe the steps taken for an incorrect count. 6. Identify situations when an initial count may be omitted. 7. Demonstrate the procedure for counting instruments, sponges, sharps, and other items on the sterile field. 8. List the items included in the counting procedure. 9. Identify surgical staplers by form and function. 10. Explain the usage and handling of staplers and hemostatic devices. 11. Identify and describe uses of various types of syringes. 12. State the common usage of various hypodermic needles. 13. Name one use for a spinal needle. 14. Name an indication for use of a plain tip syringe. 15. Name an indication for use of a TB syringe in surgery. 16. State the procedure/formula for preparing medications that will be diluted. 17. Describe the safe practices in transferring drugs and solutions from the non-sterile area to the sterile field. 18. Describe the technique for opening an ampule and withdrawing the medication. 19. Demonstrate aseptic technique in the handling of medications. 20. Demonstrate the procedure for drawing up medications from a vial. 21. Demonstrate the one-hand recapping technique. 22. Demonstrate the labeling of medication containers and delivery devices on the sterile field. 23. Demonstrate the passing of medications during a surgical procedure. 24. Correlate and demonstrate the process of reading a partially filled syringe and calculating medication dosage administration. 25. Demonstrate sharps safety in handling hypodermic needles. 26. Demonstrate the technique for filling an asepto syringe.	2	5	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
1. Arranging Instruments on the Mayo Stand through Ready to Drape; 2. Instrument Quiz #6; 3. Vascular and Cardiothoracic Instruments; 4. Review Clinical Guidelines; 5. Review SUR 232 Syllabus; 6. Review the Pre-procedure Assignment; 7. Review the Definition Form; 8. HIPAA Guidelines; 9. Platinum Planner and Logging Clinical Cases	1. Demonstrate the organization of the Mayo Stand. 2. Define HIPAA and explain the surgical technologist's responsibility in maintaining patient confidentiality.	1	4	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
15	45	0