

# ALH 0025 - SURGICAL SPECIALTIES FOR SURGICAL TECHNOLOGY

## Catalog Description

Hours: 108 lecture

Description: Covers the most common procedures and equipment utilized by the surgical technologist during specialty surgery. These specialties include neurosurgery, vascular surgery, orthopedic surgery and others. Prepares the student for the national certification exam. (letter grade only) (not transferable)

## Course Student Learning Outcomes

- CSLO #1: Discuss and analyze the rationales for a given advanced surgical procedure is performed.
- CSLO #2: Identify and determine the appropriate use of the instruments, supplies and equipment utilized in a given advance surgical specialty.
- CSLO #3: Assess and choose the appropriate medications prescribed in a given advance surgical specialty.
- CSLO #4: Identify and evaluate the surgical anatomy of a given advance surgical specialty.

## Effective Term

Spring 2025

## Course Type

Credit - Degree-applicable

## Contact Hours

108

## Outside of Class Hours

216

## Total Student Learning Hours

324

## Course Objectives

1. Describe advance surgical procedures for corresponding advance surgical specialty.
2. Identify the pathology involved in a given advance surgical procedure.
3. Describe the typical pre-and post-op care for a patient of a given advance surgical specialty.
4. Identify corresponding surgical instruments commonly used on a given specialty.
5. Identify given pharmaceuticals with it's corresponding application in an advance specialty procedure.
6. Demonstrate knowledge of sutures commonly used by a given advance surgical specialty.

7. Compare and contrast two alternatives to a given procedure in an advance surgical specialty.
8. Demonstrate specific wound dressings for specific advance surgical procedures and specialty.
9. Determine complications common to patients undergoing procedures of a given advance surgical specialty.
10. Recommend choices of positioning equipment needed in given specialty procedures.
11. Explain the purpose of supply items commonly used on a given advance surgical specialty.
12. Discuss precautions to take to protect patients and staff when assisting a surgeon during a given advance surgical specialty.
13. Recommend antiseptic options for preparing the incision site in given advance surgical procedures.
14. Discuss potential surgical complications for a given advance surgical procedure.
15. Determine anesthetic technique options in given advance surgical procedures.

## General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

## Articulation Information

- Not Transferable

## Methods of Evaluation

- Classroom Discussions
  - Example: Students participate in a discussion on preparing patients for various specialty procedures such as an incision and drainage (I&D). What are the pros and cons of an I&D? Why are they performed? Participation percentage of grade equals 10%.
- Objective Examinations
  - Example: Objective Exam: Example as it pertains to the final exam. Standard Grading. 1. What are some of the common signs and symptoms of septic shock? a. hypotension b. fever, chills c. clammy skin d. oliguria e. all of the above
- Projects
  - Example: Students will research and present on the different suture types, preferred usages, various suturing methods.

## Repeatable

No

## Methods of Instruction

- Lecture/Discussion
- Distance Learning

Lecture:

1. Instructor PowerPoint presentation on the various surgical specialties and discuss the pros and cons of their advanced procedures.
2. Instructor will assign chapter specific reading and students will identify at least 3 common instruments for an advanced procedure.

## Distance Learning

1. Instructor PowerPoint presentation on common pre- and postoperative care and various post-surgical complications. This will be followed by an online discussion with students on the Surgical Technician's scope of practice as it pertains to triaging and evaluating patients.

- Author: Cengage
- Publisher: Cengage
- Publication Date: 2025
- Text Edition: 6
- Classic Textbook?:
- OER Link:
- OER:

## Typical Out of Class Assignments

### Reading Assignments

1. Review section in textbook on the precautions that should be taken by staff to ensure the safety of the operating room (OR) and patient. Identify key principles in safety precautions required by the OR staff as well as implications when safety protocol is not followed.
2. Read and memorize OR safety guidelines. List on handout for discussion next class.
3. Read section in textbook on "Infection Control" and answer critical thinking exam based question: Instruments that penetrate a patient's skin should be (answer = sterilized).

## Other materials and-or supplies required of students that contribute to the cost of the course.

## Writing, Problem Solving or Performance

Short essay on the that compares and contrasts two alternatives to a given procedure in an advance surgical specialty.

## Other (Term projects, research papers, portfolios, etc.)

Write paper on the importance on the patient demographics such as general health and/or medicine use, age, and gender for the consideration of advanced procedures and preoperative measures.

## Required Materials

- Surgical Equipment and Supplies
  - Author: Colleen J. Rutherford
  - Publisher: FA Davis
  - Publication Date: 2023
  - Text Edition: 3
  - Classic Textbook?:
  - OER Link:
  - OER:
- Pocket Guide to the Operating Room
  - Author: Pocket Guide to the Operating Room
  - Publisher: FA Davis
  - Publication Date: 2020
  - Text Edition: 4
  - Classic Textbook?:
  - OER Link:
  - OER:
- Pharmacology for the Surgical Technologist
  - Author: Tiffany Howe, Angela Burton
  - Publisher: Elsevier
  - Publication Date: 2025
  - Text Edition: 6
  - Classic Textbook?:
  - OER Link:
  - OER:
- Surgical Technology for the Surgical Technologist Textbook