

Montgomery County Community College
 SUR 106
 Surgical Technology II
 8-6-8

COURSE DESCRIPTION:

This course is designed to build on the knowledge gained in SUR 105. Fundamental team skills and knowledge of medical terminology are enhanced in SUR 106 and applied in the environment of the operating room and various specialties of surgery. Basic concepts of electricity and specialty equipment are introduced with the emphasis on safe patient care in the operating room. Patient, equipment, and supply preparation are demonstrated in the following types of surgeries: ear, nose, throat, mouth, jaw, and eye. The specialty of cosmetic and reconstructive plastic surgery is presented. Students are exposed to neurosurgery of the spinal column and the brain. The actual procedural stages for each basic surgery within the aforementioned specialties are presented and reinforced in the clinical setting. The concurrent clinical laboratory experience during the actual surgical interventions affords students the opportunity to directly apply didactic information.

REQUISITES:

Previous Course Requirements

- BIO 131 Human Anatomy and Physiology I
- BIO 140 Microbiology and Immunology
- SUR 105 Surgical Technology I

Previous or Concurrent Course Requirement

- BIO 132 Human Anatomy and Physiology II

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
1. Differentiate the role and expectations of the Surgical Technologist within the operative team while delivering care to the patient during the following specialty surgeries: ear, nose, throat, mouth, jaw, eye, cosmetic plastic, reconstructive plastic, and neurosurgery of the spine and brain.	Lecture with Visuals/ Discussion Reading/Assignments Role Playing/Simulation in the Operating Room Learning Lab Clinical Practice Professional Resources	Written Exams/Quizzes Discussion/Written Assignments Clinical Performance

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
2. Define the accountability and environmental requirements of the Surgical Technologist in caring for specialty surgical patients.	Lecture with Visuals/ Discussion including AV/Multimedia Materials Reading/ Assignments Role Playing/Simulation in the Operating Room Learning Lab Clinical Practice	Written Exams/Quizzes Discussion/Written Assignments Clinical Performance
3. Apply aseptic technique in preparing the patient for surgery while demonstrating use of specialty instruments, equipment, and sterile supplies for the listed specialty surgeries.	Lecture with Visuals/ Discussion including AV/Multimedia Materials Reading/Assignments Demonstration Role Playing/Simulation in the Operating Room Learning Lab Clinical Practice Professional Resources	Written Exams/Quizzes Discussion/Written Assignments Return Demonstration with Validation Clinical Performance
4. Demonstrate the ability to prioritize and organize the surgical field for the specialty surgeries considering the urgency of patient care.	Lecture with Visuals/ Discussion including AV/Multimedia Materials Reading/Assignments/ Case Studies Demonstration Role Playing/Simulation in the Operating Room Learning Lab Clinical Practice	Written Exams/Quizzes Discussion/Written Assignments Return Demonstration with Validation Clinical Performance
5. Correlate the anatomy and physiology of the specialties listed to the procedural stages for the surgical interventions.	Lecture with Visuals/ Discussion including AV/Multimedia Materials Reading/Assignments/ Case Studies Assignments/Written Experiences/Case Studies Paralleling Clinical Experience Clinical Practice	Written Exams/Quizzes Discussion/Written Assignments Clinical Performance
6. Demonstrate, written and verbally, proper use of medical terminology with a focus on the specialty surgeries addressed in the course.	Oral and Written Presentation of Case Study Reading/Assignments/ Case Studies Assignments/Written Experiences Paralleling Clinical Experience Research Resources Clinical Practice	Written Exams/Quizzes Written Report/Oral Presentation Discussion/Written Assignments Clinical Performance

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
7. Demonstrate utilization of terms and concepts related to electricity, electrical flow and specialty equipment including direct application to safe clinical practice.	Lecture with Visuals/ Discussion including AV/Multimedia Materials Reading/Assignments Demonstration/Role Playing/Simulation in the Operating Room Learning Lab Clinical Practice Professional Resources	Written Exams/Quizzes Discussion/Written Assignments Return Demonstration with Validation Clinical Performance

At the conclusion of each semester/session, assessment of the learning outcomes will be completed by course faculty using the listed evaluation method(s). Aggregated results will be submitted to the Associate Vice President of Academic Affairs. The benchmark for each learning outcome is that *70% of students will meet or exceed outcome criteria.*

SEQUENCE OF TOPICS:

1. Orientation
2. Course Specific Medical Terminology
 - A. Combining Prefixes, Word Root & Suffixes to Create Medical Terms Related to Surgery
 - B. Constructing & Combining Compound Words
 - C. Pronunciation of Medical Terms Related to Surgery
 - D. Writing Medical Terms Related to Surgery
3. Electricity/Specialty Equipment
 - A. Electricity
 - B. Terminology Related to Electricity, Electrical Flow & Physics
 - C. Identify Electrical Flow
 - D. Types of Electrical Current
 - E. Components of Electrical Current & Related Terms to Physics
 - F. Application of Electrical Knowledge & Principles of Safe Patient Care Practices in the O.R.
 - G. Lasers and Specialty Equipment
4. Ear Surgery
 - A. Anatomy and Relationship to Procedure
 - B. Instruments, Set-Up, Counting
 - C. Equipment for Procedure
 - D. Procedural Stages for Surgical Intervention
 - E. Potential Complications
5. Nose Surgery
 - A. Anatomy and Relationship to Procedure
 - B. Instruments, Set-Up, Counting
 - C. Equipment for Procedure
 - D. Procedural Stages for Surgical Intervention
 - E. Potential Complications

6. Throat, Mouth, and Jaw Surgery
 - A. Anatomy and Relationship to Procedure
 - B. Instruments, Set-Up, Counting
 - C. Equipment for Procedure
 - D. Procedural Stages for Surgical Intervention
 - E. Potential Complications
7. Eye Surgery
 - A. Anatomy and Relationship to Procedure
 - B. Instruments, Set-Up, Counting
 - C. Equipment for Procedure
 - D. Procedural Stages for Surgical Intervention
 - E. Potential Complications
8. Cosmetic Plastic Surgery
 - A. Anatomy and Relationship to Procedure
 - B. Instruments, Set-Up, Counting
 - C. Equipment for Procedure
 - D. Procedural Stages for Surgical Intervention
 - E. Potential Complications
9. Reconstructive Plastic Surgery
 - A. Anatomy and Relationship to Procedure
 - B. Instruments, Set-Up, Counting
 - C. Equipment for Procedure
 - D. Procedural Stages for Surgical Intervention
 - E. Potential Complications
10. Neurosurgery of the Spine
 - A. Anatomy and Relationship to Procedure
 - B. Instruments, Set-Up, Counting
 - C. Equipment for Procedure
 - D. Procedural Stages for Surgical Intervention
 - E. Potential Complications
11. Neurosurgery of the Brain
 - A. Anatomy and Relationship to Procedure
 - B. Instruments, Set-Up, Counting
 - C. Equipment for Procedure
 - D. Procedural Stages for Surgical Intervention
 - E. Potential Complications

LEARNING MATERIALS:

- Schroeder, C.L., Ehrlich, L., Schroeder-Smith, K., Ehrlich, A. (2021). *Medical Terminology for Health Professions* (9th ed.). Boston, MA: Cengage Learning.
- Frey, K.B. (2018). *Surgical Technology for the Surgical Technologist: A Positive Care Approach* (5th ed.). Boston, MA: Cengage Learning.
- Rothrock, J.C. & Alexander, S. M. (2012). *Alexander's Surgical Procedures*. (1st ed.). St. Louis, MO: Mosby Elsevier Inc.

Other learning materials may be required and made available directly to the student and/or via the College's Libraries and/or course management system.

COURSE APPROVAL:

Prepared by:	Beverly Siftar, RN, MSN, CNOR and Dr. Victoria L. Bastecki-Perez	Date:	1/2003
Revised by:	Erin White, MS, CST	Date:	1/2008
VPAA/Provost Compliance Verification:	Dr. John C. Flynn, Jr.	Date:	9/11/2009
Revised by:	Erin White-Mincarelli, Doctoral Candidate, MS, CST	Date:	5/2012
VPAA/Provost or designee Compliance Verification:	Victoria L. Bastecki-Perez, Ed.D.	Date:	5/30/2012
Revised by:	Erin White-Mincarelli, Doctoral Candidate, MS, CST	Date:	10/2012
VPAA/Provost or designee Compliance Verification:	Victoria L. Bastecki-Perez, Ed.D.	Date:	10/18/2012
Revised by:	Erin White-Mincarelli, PhD, MS, CST	Date:	9/12/2017
VPAA/Provost or designee Compliance Verification:	Victoria L. Bastecki-Perez, Ed.D.	Date:	11/7/2017
Revised by:	Erin White-Mincarelli, PhD, MS, CST, FAST	Date:	11/20/2023
VPAA or designee Compliance Verification:		Date:	11/29/2023



This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.