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## AHST 101.01: Introduction to Surgical Technology

Debbie S. Fillmore *University of Montana - Missoula*, debbie.fillmore@mso.umt.edu

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# MISSOULA COLLEGE OF THE UNIVERSITY OF MONTANA

## SURGICAL TECHNOLOGY PROGRAM

### **COURSE SYLLABUS**

COURSE NUMBER AND TITLE: AHST 101 Introduction to Surgical Technology

**DATE REVISED**: Spring 2016

**SEMESTER CREDITS**: 3

**CONTACT HOURS PER SEMESTER: 45** 

PREREQUISITE COURSES: Acceptance into the program with satisfactory completion of the following, or

their equivalency:

**CAPP 120** 

BIOH 201N/202N WRIT 121 or WRIT 101

M 105 AHMS 144 PSYX 100S

**INSTRUCTOR NAME**: Debbie Fillmore ME, BSN-RN, CST – Program Director

**E-MAIL ADDRESS**: debbie.fillmore@mso.umt.edu

PHONE NUMBER: Office: 406-243-7860

**OFFICE LOCATION**: Room: AD 07, Administration Building, Missoula College-East Campus

**OFFICE HOURS**: M, W 3:00-5:00 PM

Or by appointment.

#### **RELATIONSHIP TO PROGRAM:**

Upon completion of this course, the student will be able to correlate the knowledge and understanding of (entry-level) surgical technologist skills. This course provides the knowledge base that correlates with AHST 115 Surgical Lab I. This knowledge will enable the student to complete the competency profile in AHST 115 and successfully matriculate to more advanced knowledge coursework.

#### **COURSE DESCRIPTION:**

AHST 101 presents entry level responsibilities and competencies of the surgical technologist and related nursing procedures in both the scrub and circulator roles.

#### STUDENT PERFORMANCE OUTCOMES:

Upon completion of this course, the student will be able to:

- 1. Trace the historical development of surgery
- 2. Discuss various health care settings and their delivery of care
- 3. Identify hospital departments that relate to the surgical department in providing quality patient care
- 4. Identify factors that affect his/her personal life including current lifestyle, accountability for actions and obligations and types of stress, their causes and methods of coping
- 5. Identify and demonstrate principles of communication and their importance in the surgical setting
- 6. List and explain the impact of professional organizations, etc. relevant to OR practice
- 7. Identify and interpret a job description for a surgical technologist
- 8. Identify members of the surgical team and their roles
- 9. Define and interpret ethical, moral and legal responsibilities
- 10. Identify various aspects of the physical environment of the surgical department including the physical layout, the operating room equipment and environmental safety issues
- 11. Understand the purpose for the "case cart" method of case preparation
- 12. Identify the various elements of surgical attire and their importance
- 13. Discuss the concepts of asepsis and describe their application
- 14. Identify and describe the physical and chemical methods used to protect patients and workers from invasion by pathogenic microbes
- 15. Identify principles and describe techniques of disinfection and antisepsis
- 16. Identify basic instruments by type, function and name and will describe care, handling and assembly
- 17. Define surgical conscience and identify its application in relation to the surgical patient and all principles of surgical asepsis
- 18. Describe Standard Precaution practices
- 19. Describe techniques of opening and preparing supplies and instruments needed for any operative procedure, with maintenance of asepsis at all times
- 20. Explain the process of the surgical scrub, gowning and gloving
- 21. Identify the rights of health care consumers to receive quality patient care
- 22. Describe various suture materials and their use.

#### STUDENT PERFORMANCE ASSESSMENT METHODS AND GRADING PROCEDURES:

Student grades are determined after careful judgement of each assignment against a set of criteria, as indicated, for each assignment. The majority of your final grade will be determined from unit exams, but you may also be asked to do student presentations and written assignments.

Written assignments will be double-spaced and typed or printed on a letter-quality printer and are due during class on the assigned day. Note that each written assignment includes careful evaluation of the quality of writing.

The evaluation process includes:

| Unit Exams                      | 60% |
|---------------------------------|-----|
| Final Exam                      | 30% |
| Misc. Assignments               | 5%  |
| Attendance and Professionalism* | 5%  |

<sup>\*</sup>Based on the Student Conduct Code (UM and ST).

| Excellent work earns a point value between: | 93-100 | A Grade |
|---|--------|---------|
| Good work earns a point value between:      | 86-92  | B Grade |
| Fair work earns a point value between:      | 80-85  | C Grade |

Any final grade determination of less than 80% will result in failure of course.

A Surgical Technology student must pass <u>all</u> required AHST courses (with traditional grading of A-F) with an 80% or will not *be allowed to continue in the program and will need to re-apply for program admission.* All curriculum courses, other than AHST, must be passed with a grade of "C" (2.0). A student may take a course a total of two (2) times.

Please note: This course requires concurrent enrollment in AHST 115 Surgical Procedures Lab I. If a student fails a course while in the program, he/she will be unable to progress through the surgical technology curriculum. There is a strong relationship between good sterile procedure skills and quality, safe patient care. Therefore, if a student gets out of program sequence for any reason, he/she must re-apply, and if admitted, repeat the lab skills courses (AHST 115 and, if a student has progressed to the second year, AHST 215 also) prior to continuation in the program. This will ensure the student possesses the skill level required for safe patient care when entering the clinical (hospital) component of the curriculum. Students who do not pass the required lab skills in either AHST 115 or 215 will not be able to continue in the program or reapply to the program.

#### ATTENDANCE POLICY:

Attendance and participation are valued in this course. Therefore, class attendance will be taken. Prompt and regular attendance will be expected in order to meet course objectives.
 Students are expected to notify the instructor (243-7860) prior to class if unable to attend or if student will be arriving late. Failure to do so may result in a student not being able to make up exam. Students are to notify faculty by phone, not email or text.

- Students may be asked to furnish a physician's statement regarding an absence. The student is
  responsible for gathering any information or course materials he or she may have missed due
  to absence or tardiness.
- Repeated absences will result in completion of a "Student Contract". A student's final grade may be decreased 1 percentage point for each absence.
   (Example: final grade = 94% (A); student has two absences; final grade = 92% (B))
- Disruptive or rude behavior may initiate a "Student Contract". Each time a contract is initiated may result in a **5 point** deduction of the final grade.
- If a student misses an exam, the make-up test will be administered in the Academic Support Center (ASC) and must be completed the day the student returns to campus. The student will need to call the ASC (243-7826) and schedule a time to take the exam. No make-up exam may be taken after five days.

If the instructor has not been notified prior to the absence, the instructor may not allow a make-up exam to be administered.

- Final exams will only be administered on the scheduled day. **Exams may not be taken early**.
- Chronic car problems, finances, jobs or job interviews are not valid excuses for missing classes or assignments.
- Tardiness will not be tolerated. It is disruptive to fellow students. Repeated tardiness will
  result in completion of a "Student Contract". The student's final grade may be decreased 1
  percentage point for each tardy attendance.
- It is expected that cell phones, or any electronic devices, will be <u>off</u> during class time, unless student has prior approval from instructor.
- Your course of instruction should be your highest priority.
- Each student situation is considered by the instructor on an individual basis. It is up to the discretion of the instructor whether or not a student is meeting course objectives.

#### **INSTRUCTIONAL NOTES:**

Students will engage in classroom discussions, small group cooperative learning activities and student presentations. Other teaching techniques to be utilized include: lecture, use of computer and video applications and guest presentations. You are expected to be prompt for class and well-prepared to participate appropriately in discussion and activities. **Assigned readings are to be read prior to class**.

#### **ACADEMIC INTEGRITY:**

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by The University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at <a href="http://www.umt.edu/vpsa/policies/student\_conduct.php">http://www.umt.edu/vpsa/policies/student\_conduct.php</a>

Academic misconduct is defined as all forms of academic dishonesty, including but not limited to:

- 1. Plagiarism
- 2. Misconduct during an examination or academic exercise
- 3. Unauthorized possession of examination or other course materials
- 4. Tampering with course materials
- 5. Submitting false information
- 6. Submitted work previously presented in another course
- 7. Improperly influencing conduct
- 8. Substituting, or arranging substitution, for another student during an examination or other academic exercise
- 9. Facilitating academic dishonesty
- 10. Altering transcripts, grades, examinations or other academically related documents

Exams are the property of the program. Any attempt to copy exam content <u>in any manner</u> will result in a violation of the Student Conduct Code.

#### **RECORDING OF CLASSES:**

Lecture recording is not allowed without prior consent of the instructor. In blended classes or distance learning classes, recorded lectures are not allowed to be re-broadcast in any way (<u>social media included</u>) or any material discussed, in face to face classes or in on-line discussion groups, because of their confidential nature. If a student breaks this policy, it will be considered academic misconduct.

#### **DISABILITY ACCOMMODATION:**

Eligible students with disabilities will receive appropriate accommodations in this course when requested in a timely way. Please speak with me after class or in my office. Please be prepared to provide a letter from your DSS Coordinator. For more information, visit the Disabilities Services website at <a href="http://www.umt.edu/dss/">http://www.umt.edu/dss/</a> or call 406-243-2243 (voice/text).

Note: Instructor reserves the right to modify syllabi and assignments as needed based on faculty, student, and/or environmental circumstances.

### **BACKGROUND CHECK:**

Students will be required to have a criminal background check and an OIG (Office of Inspector General) Review. A drug screen may also be required. Healthcare agencies that are utilized for clinical and/or internship experiences require this evaluation. Students with positive checks and/or screenings will be denied clinical experience in the healthcare agency.

If a student is denied agency access, there will be no placement at an alternate site, and the subsequent inability of the student to complete the clinical education will result in inability to continue in the Surgical Technology program.

#### **CLINICAL AREAS:**

If a student is removed from a clinical site at the site's request, the program is not responsible for finding additional facilities for the student. The dismissal may be due to student behavior, background check information or any reason the site chooses. No student is allowed access to a clinical site outside of assigned hours. A student may be suspended from the program if found in a clinical area without approval.

### CATALOG

It is a student's responsibility to read and understand the content included in the University catalog section that applies to you. You may access this information at the following site:

http://www.umt.edu/catalog/

## **REQUIRED TEXTS:**

Surgical Technology Principles and Practice 6<sup>th</sup> Ed

Author: Fuller Publisher: Elsevier

Workbook to accompany Surgical Technology Principles and Practice

Author: Fuller Publisher: Elsevier

Surgical Technology for the Surgical Technologist 4<sup>th</sup> Ed

Author: AST

Publisher: Delmar/Cengage

<u>Alexander's Surgical Procedures</u>

Author: Rothrock/Alexander

Publisher: Elsevier

Pocket Guide to the Operating Room

Author: Goldman Publisher: Davis

## Instrument Pocket Guide

Author: Wells Publisher: Saunders

## Pathology for Health-Related Professions

Author: Damjanov Publisher: Elsevier

## **Differentiating Surgical Instruments**

Author: Rutherford

Publisher: Davis

## <u>Differentiating Surgical Equipment and Supplies</u>

Author: Rutherford

Publisher: Davis

## Operating Room Skills: Fundamentals for the Surgical Technologist

Author: Dankanich Publisher: Pearson

## Pharmacology for the Surgical Technologist

Author: Snyder Publisher: Saunders

## **OPTIONAL TEXTS**:

## **Surgical Mayo Setups**

Author: Allhoff Publisher: Delmar

### **OTHER COURSE MATERIALS:**

- Three ring notebook to accommodate course materials
- Access to a computer to download course materials
- Anatomy text of choice
- Medical Dictionary of choice

### AHST 101 - Introduction to Surgical Technology

#### **COURSE OUTLINE:**

- I. <u>Introduction to Surgical Technology</u>
  - A. History of Surgery
  - B. Surgery Today
    - 1. Surgical Specialties
  - C. The Surgical Technologist
    - 1. History
    - 2. Education, Accreditation and Certification
      - a. The Learning Environment
      - b. Organizational Structure of the Educational Facility
      - c. Program Accreditation
      - d. The Core Curriculum
      - e. Professional Credentialing
  - D. Your Career as a Surgical Technologist
    - Desirable Attributes/Personal Characteristics of the Surgical Technologist
    - 2. Standards of Practice
    - 3. Professionalism
    - 4. Role, Clinical Competency and Scope of Practice
      - a. Assistant Circulator Role
      - b. Surgical Technologist: 1<sup>st</sup> and 2<sup>nd</sup> scrub role
    - 5. Job Description
    - 6. Professional Organizations
    - 7. Career Development and Opportunities
    - 8. Clinical Ladder
    - 9. Surgical Conscience
    - 10. Realities of clinical practice
    - 11. Working conditions
    - 12. Problem-solving skills
    - 13. Reality Shock
    - 14. Stress reduction
    - 15. Lifestyle
  - E. Members of the OR team and their Roles
    - 1. Surgical Attire
    - 2. Sterile Team Members
    - 3. Non-sterile Team Members
    - 4. Teamwork
    - 5. Communication
    - 6. Conflict resolution
  - F. The Three Phases of Surgical Case Management
    - a. Preoperative Case Management
    - b. Intraoperative Case Management
    - c. Postoperative Case Management
  - G. Hospital Organization
    - 1. Types of healthcare facilities
    - 2. Organizational structure and Departments
    - 3. Interdepartmental Communication
    - 4. Financial Considerations and Reimbursement

### 2. The Patient in Surgery

- A. Define the role of the perioperative management team
- B. Describe the relationship between the perioperative environment and other patient care departments
- C. Define patient-centered and outcome-oriented care
- D. List the domains of Maslow's hierarchy of human needs
- E. Describe the role of the Surgical Technologist in each of the domains of Maslow's hierarchy
- F. Discuss therapeutic communication:
  - 1. Paraphrasing
  - 2. Restatement
  - 3. Reflection
  - 4. Therapeutic Response
- G. Distinguish and assess the physical, spiritual and psychological needs of the patient
- H. Distinguish and discuss cultural and religious influences on the surgical patient
- I. Describe therapeutic touch
- J. Discuss how work environment affects performance.
- K. Explain HIPAA

## 3. <u>Legal Concepts, Risk Management and Ethical Issues</u>

- A. AHA Patient Care Partnership
- B. Legal Issues in the Operating Room
- C. Advanced Directives
- D. Types of Law
  - 1. Common Law
  - 2. Civil Law
  - 3. Malpractice
  - 4. Negligence
- E. Torts
  - 1. Intentional
  - 2. Unintentional
- F. Informed Consent
- G. Sentinel Events
- H. Prevention of Medical Errors
- Risk Management and Liability
  - 1. HIPAA
  - 2. Malpractice Insurance
- J. Managing Employee and Patient Injuries
  - 1. Incident Forms
- K. Joint Commission
- L. Ethical and Moral Issues
  - 1. Codes of Conduct

## 4. <u>The Physical Environment and Safety Issues</u>

- A. Physical Design of the Surgical Department
- B. Direct Support Services
- C. Ambulatory Surgery
- D. Surgical Department (Suite)
  - 1. Proper OR Attire
  - 2. Principles of Layout and design
  - 3. Operating Room
  - 4. OR Equipment/Furniture

- 5. Surfaces in the Operating Room
- 6. Doors
- 7. Ventilation System
- 8. Instrument Room
- 9. Gases/Tank Colors
- 10. Case Cart System/Custom Packs
- 11. Utility, Decontamination and Cleaning Procedures
- 12. Traffic Patterns
- E. Care of the Perioperative Environment
- F. Regulatory Agencies
  - 1. Joint Commission
  - 2. Risk Management
  - 3. CQI
- G. Safety Considerations
- H. Electrical Hazards
- I. Ionizing Radiation
- J. Biological Hazards
- K. Management of Exposure
- L. Laser and ESU Plume
- M. Latex Allergy
- N. Chemical Hazards
- O. Universal/Standard Precautions

## 5. <u>Preventing Perioperative Disease Transmission</u>

- A. Pathogens and Infection
- B. Pathogens Associated with Surgical Site Infection
- C. Methods of Transmission
- D. Factors that Influence Risk of SSI
- E. Classification of Patient Care Items
  - 1. Critical
  - 2. Semi-Critical
  - 3. Non-Critical
- F. Disinfection Principles and Disinfecting Agents
- G. Environmental Decontamination
- H. Sterilization Principles and Processes
  - 1. Instrument Prep/Wrapping
  - 2. Steam Sterilization
  - 3. Hydrogen Peroxide Gas Plasma
  - 4. Liquid Chemical Sterilization Processes
  - 5. Ionizing Radiation
  - 6. Alternative Sterilization Methods
- I. Event-Related Sterility
- J. Review of Surgical Conscience

### 6. Surgical Case Management: Preoperative Preparation

- A. Principles of Surgical Asepsis
- B. Preliminary Preparation of the OR
  - 1. Room Setup
  - 2. Gather Equipment/Instruments
  - 3. Check Case Cart and Place Packs on Appropriate Furniture
- C. Division of Duties
- D. Opening Sterile Supplies

- E. Surgical Scrub
- F. Gowning and Gloving
- G. Preparation of Supplies
  - 1. Opening Basic Pack
  - 2. Arranging Basins
  - 3. Draping Mayo Stand
  - 4. Gaining an Elementary Knowledge of Sutures
- H. Creating and Maintaining the Sterile Field

## 7. <u>Surgical Instrumentation, Equipment and Supplies</u>

- A. Classification
  - 1. Cutting and dissecting
  - 2. Clamping and occluding
  - 3. Grasping and holding
  - 4. Retracting and exposing
- B. Care and handling
- C. Passing instruments
- D. Assembling minor sets

## 8. <u>Surgical Case Management: Intraoperative and Postoperative</u>

- A. Preparation of case
  - 1. Arranging mayo stand
  - 2. Arranging back table
- B. Sponge, sharps and instrument counts
- C. Intraoperative techniques
  - 1. Starting a procedure
  - 2. Receiving sterile items from circulator
  - 3. Handling of medications
  - 4. Intraoperative Communication
  - 5. Positioning the Sterile Team and Furniture
  - 6. Progression of the Surgical Procedure
  - 7. Maintaining Order Within the Sterile Field
- C. Postoperative Case Management
  - 1. Dressing Application
  - 2. Specimen Care
  - 3. Preservation of the Sterile Field
    - a. Drape Removal
    - b. Gown and Glove Removal
    - c. Immediate Postoperative Patient Care
  - 4. Breaking Down a Sterile Field

| I have read, understand and agree to the contents of the syllabus for course |
|--|
| AHST 101, Introduction to Surgical Technology. I have had the opportunity to |
| ask questions regarding course requirements.                                 |

| Student Signature |  |  |
|-------------------|--|--|
|                   |  |  |
|                   |  |  |
| Date              |  |  |