Fall 9-1-2018

AHST 200.01: Operating Room Techniques

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MISSOULA COLLEGE
of the University of Montana

COURSE SYLLABUS

COURSE NUMBER AND TITLE: AHST 200 Operating Room Techniques

DATE REVISED: Fall 2018

SEMESTER CREDITS: 5

CONTACT HOURS PER SEMESTER: 75

PREREQUISITES: Successful completion of first year spring semester courses

INSTRUCTOR NAME: Katie Geiger CSTFA BS

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PHONE NUMBER: Office: (406) 240-7606

OFFICE LOCATION: Room: 307

OFFICE HOURS: By Appointment

RELATIONSHIP TO PROGRAM:

Upon completion of this course, the student will be able to correlate the knowledge and understanding of more complex entry level surgical technologist skills. AHST 200 provides the knowledge base that correlates with AHST 215 Surgical Lab II. The knowledge gained will enable the student to successfully complete the unit exams and matriculate to more advanced Surgical Technology coursework.

COURSE DESCRIPTION:

AHST 200 Operating Room Techniques discusses the more complex responsibilities and competencies of the surgical technologist and related nursing procedures in both the scrub and circulator roles in the pre-operative, intra-operative and post-operative period.

STUDENT PERFORMANCE OUTCOMES:

Upon completion of this course, the learner will:

1. Describe the physical preparation and care that the surgical patient may receive prior to the surgical procedure.
2. Evaluate the items on the preoperative patient checklist.
3. State the purposes of proper identification.
4. Describe the identification process for a surgical patient admitted to the surgical department.
5. Identify the methods of patient transportation.
6. Describe the principles of safe transportation for each of the aforementioned methods.
7. Analyze laboratory reports in relationship to patient diagnosis and interventions.
8. Describe the methods of reviewing a patient chart for completeness.
9. Discuss methods of patient transfer.
10. Identify equipment utilized for safe transfer of the surgical patient.
11. Assess the standards and policies to promote patient satisfaction in the perioperative setting.
12. Develop a plan to educate patients regarding the anticipated recovery process.
13. Evaluate the common sources of documentation utilized in the operating room.
14. Judge the importance and impact of proper documentation.
15. Discuss the use, components, and aides utilized to achieve various surgical positions.
16. Describe the basic surgical positions.
17. Describe the homeostatic parameters monitored in the OR setting.
18. Contrast and compare different types of skin preparations.
19. Contrast and compare different chemical agents used for skin preparation.
20. Describe the steps and rationales for surgical skin preparation.
21. List the indications for urinary catheterization.
22. Discuss the basic considerations for urinary catheterization.
23. List the supplies required to perform urinary catheterization.
24. Describe the steps in performing urinary catheterization.
25. Discuss the principles of monitoring urine output.
26. Compare and contrast the types and characteristics of various catheters and drainage devices.
27. Describe the preparation of catheters and drains for intraoperative use.
28. Describe various types of draping material used in surgical procedures.
29. Describe the general principles of draping the patient and any necessary equipment and furniture.
30. Analyze the principles of hemostasis.
31. Differentiate among various methods of hemostasis.
32. Analyze the factors that influence the closure of each wound layer.
33. Compare and contrast suture materials, suture sizing and suture coatings.
34. Describe proper suture selection, preparation, handling and cutting techniques.
35. Diagram and describe needle points and needle bodies.
36. Describe handling, loading and disposal of surgical needles.
37. Analyze various tissue repair and replacement materials and assess the advantage and disadvantages of utilizing repair and replacement materials.

38. Interpret the specific applications of synthetic mesh, synthetic tissue replacement materials and biological wound cover materials.
39. Analyze the classifications of surgical wounds.
40. List surgical procedures that fit the various classifications of surgical wounds.
41. Compare and contrast intentional, unintentional and incidental/chronic wounds.
42. Analyze the mechanisms of wound healing, the inflammatory process and the healing process.
43. Evaluate the purposes of surgical dressings.
44. Compare and contrast the most commonly used types of surgical and specialty dressings.
45. Describe proper principles of sterile technique in the application of commonly used types of surgical and specialty dressings.
46. Explain the necessity of each of the following components of anesthesia preparation of the surgical patient: assessment, monitoring devices, positions for induction, thermoregulatory devices, and intravenous access.
47. Describe emergency procedures carried out in the OR setting
48. Define specimen.
49. Assess methods of obtaining specimens.
50. Describe the handling of tissue specimens.
51. Identify types of containers.
52. Describe the procedure for specimen labeling and transfer to appropriate department.
53. Discuss successful practices in providing culturally-sensitive healthcare to a variety of diverse clients.
54. Discuss surgical applications of the Technological Sciences:
    a. Surgical applications of computers
    b. Electricity for the Surgical Technologist
    c. Physics for the Surgical Technologist
    d. Surgical robotics
55. Discuss disaster preparedness:
    a. Your role
    b. Types of disasters
    c. Healthcare facility readiness
    d. Chain of command structure
    e. Challenges

STUDENT PERFORMANCE ASSESSMENT METHODS AND GRADING PROCEDURES:

Student grades are determined after careful judgment of each assignment against a set of criteria, as indicated for each unit. The majority of your grade will be determined from unit exams, but you may also be asked to do student presentations and written assignments. Instructor discretion will determined if the student is meeting course and program objectives. There will be a final exam.

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

The evaluation process includes:

Unit Exams	50%
Final Exam	40%
Assignments/Attendance	10%
	100%

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 the course.

A Surgical Technology student must pass <u>all</u> required AHST courses with an 80% or will not be allowed to continue in the program and will need to re-apply for admission. As stated in The University of Montana catalog "any single course may be attempted a maximum of two times only".

Please note: If a student does not successfully complete any required course or is out of sequence for any reason, it will be necessary to reapply to the program. Also a student will be required to repeat the Surgical Procedures Lab I and II, at the time of admission into 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 <u>prior</u> to class if unable to attend or if student will be arriving late.**

- 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 and within the same week it was scheduled. The student is responsible for scheduling the exam. Please call the ASC (243-7826) to schedule. The ASC requires 48 hour notice.

If the instructor has not been notified prior to the student missing an exam, the student may not be allowed to take the make-up exam.

- 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 class.

- Tardiness or disruptive classroom behavior will not be tolerated. It is not fair to fellow students. Repeated disruptive behavior will result in completion of a "Student Contract". The student's final grade may be decreased 1 percentage point for each event.

- **It is expected that cell phones will be silenced and put away during class time**.

- 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.

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 http://www.umt.edu/vpsa/policies/student_conduct.php

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.

DISABILITY ACCOMMODATION:

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students. If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.

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 review (Office of Inspector General). 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 their clinical education will result in their 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. This 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 Practices; 7th ed
Author: Fuller
Publisher: Elsevier/Saunders

Workbook to accompany: Surgical Technology: Principles and Practices
Author: Fuller
Publisher: Elsevier/Saunders

Surgical Technology for the Surgical Technologist; 5th ed
Author: AST
Publisher: Delmar/Cengage

Differentiating Surgical Instruments (Optional)
Author: Rutherford
Publisher: F.A. Davis

Pocket Guide to the Operating Room (Optional)
Author: Goldman
Publisher: Davis

Instrument Pocket Guide (Optional)
Author: Wells
Publisher: Elsevier/Saunders

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

COURSE OUTLINE:

UNIT 1: Preoperative Preparation of the Surgical Patient

A. Patient-centered care
B. Diagnostics
C. Patient needs
D. Historical perspectives of preoperative preparation
E. The nursing process
   a. NANDA
F. Preoperative preparation/assessment including vital signs
F. Patient checklist
G. Patient identification
H. Transportation/transfers
I. Vital Signs
J. Review of the chart
K. Discharge Planning
L. Documentation
M. Joint Commission National Patient Safety Goals
   a. Universal Protocol

UNIT 2: Monitoring and Positioning of the Surgical Patient

A. Review of team roles
B. Patient positioning
C. Homeostasis

1. Hemodynamics
2. Monitoring
3. Thermoregulatory devices

C. Urinary Catheterization
D. Documentation

UNIT 3: Prepping and Draping of the Surgical Patient

A. Skin prep
B. Catheters and Drains
C. Draping
D. Documentation

UNIT 4: Hemostasis and Wound Closure

A. Hemostasis
B. Tissue approximation
C. Specimen care

UNIT 5: Wound Care and Healing

A. Wound classification
B. Wound healing
C. Surgical dressings

UNIT 6: Anesthesia Concepts

A. Definitions Relating to Anesthesia
B. Monitoring devices/Anesthesia Equipment
C. Positioning for induction
D. Thermoregulatory devices
E. General Anesthesia
F. Anesthetic Agents
G. Intravenous Agents
H. Narcotic Antagonists
I. Other Agents Used During Anesthesia
J. Solutions Used
K. Adjuncts to General Anesthesia
L. Nerve Conduction Blockade
M. Topical Anesthesia
N. Local Anesthesia
O. Regional Anesthesia
P. Team Member Roles During Anesthesia
R. Preop Visits/Patient Assessment
S. Emergency procedures
T. PACU
U. Postoperative case management

UNIT 7: Technological Sciences for the Operating Room

A. Surgical Applications of Computers
B. Electricity for the Surgical Technologist

1. Surgical applications of electricity
2. Basic principles of electricity
3. Magnetism and electricity
4. Current, volts, Ohm's Law and other terms
5. Electrosurgery

C. Surgical Robotics
1. Terminology
2. Design
3. Clinical applications
4. The Operating Room of the Future

UNIT 8: <u>All-Hazards Preparation</u>

A. Natural Disasters
B. Manmade Disasters
C. Combination Disasters
D. Disaster planning: Personal, healthcare facility, LEMA
E. National Incident Management System (NIMS)
F. Incident Command Systems (ICS)
G. Hospital emergency operations plan
H. Medical office and stand-alone out-patient surgery centers
I. National disaster planning
J. Immediate response to an all-hazards event
K. Infection control precautions
L. Triage
M. Issues during a disaster
N. Support roles of the Surgical Technologist during a disaster

Syllabus Acknowledgement

I have read the syllabus for AHST 200 Operating Room Techniques. I understand the requirements of me and the evaluation process for the course. I have had the opportunity to ask questions regarding anything not clear to me.

Student Signature _____

Date_____