

DIVISION OF HEALTH SCIENCES & HUMAN PERFORMANCE

SURGICAL TECHNOLOGY PROGRAM

ST 105 SURGICAL TECHNOLOGY I APPLICATION

COLLEGE LABORATORY GUIDE

CLINICAL ACTIVITIES FROM A TO Z

FALL 2005

**DIVISION OF HEALTH SCIENCES AND HUMAN PERFORMANCE
SURGICAL TECHNOLOGY PROGRAM**

Course Description

This course acquaints the student with the skills necessary to function as a beginning technologist. A satisfactory performance is required in the activities. Emphasis is placed on the surgical scrub, gowning, and gloving, establishing a sterile field, draping materials, needles, sutures, basic instrumentation, preparation and sterilization of supplies. The laboratory will allow the student to develop his/her skills in positioning and transporting of patients as well as developing proficiency as a beginning Surgical Technologist.

Credit

In order to receive a passing course grade for ST 105, the student must satisfactorily complete all college lab activities with an "Acceptable" score from the instructor.

Offered

Fall Semester

Prerequisite

Enrollment in ST 100
Surgical Technology - I

Introduction

The college laboratory is the place of study for the basic skills or activities necessary to function as a beginning surgical technologist. The emphasis is placed upon activities related to concepts identified in the ST 105 Syllabus.

The laboratory has been equipped to provide for the demonstration, observation, and practice of the activities necessary for the student to accomplish the clinical performance and evaluation. At various times after demonstration, observation, and practice, the student's performance of the activity will be evaluated. If the student is found to need additional practice to achieve proficiency, he/she will arrange for additional practice time as needed to achieve competency.

Course Objectives

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

- Don surgical attire
- Identify OR furniture and equipment
- Perform surgical hand scrub
- Don surgical gown and gloves
- Gown and glove team members
- Perform patient identification, vital signs, and urinary catheterization
- Transport the patient to the OR
- Position the patient and attach ESU pad
- Obtain information about resources at the LRC
- Perform shave and scrub preps on surgical patient
- Select supplies and open for procedure
- Drape OR furniture and the surgical patient
- Prepare the field for procedure
- Evaluate and identify documentation
- Utilize dressings, packing, drains, and collection systems
- Identify sponges and perform counts
- Receive/Deliver drugs onto the sterile field

Perform OR Sanitation - concurrent and terminal
Prepare surgical instruments, supplies, and equipment for sterilization
Identify, load, and pass surgical sutures/needles
Identify, assemble & pass surgical instruments
Perform end of case routine and turn around

Laboratory Guidelines

1. Attendance is mandatory. Missed labs must be made up in order to complete clinical activities before the activity can be practiced in the clinical facility.
2. Laboratory time is to be spent on demonstration, practice, observation, and evaluation of proficiency of student.
3. Independent learning is encouraged in addition to scheduled lab hours. Open lab hours are posted on lab door. Additional hours can be arranged.

Student Evaluation

1. Deadlines for evaluation are necessary to insure competency before a student may proceed to accomplish a correlated clinical activity.
2. Participation in demonstration of an activity does not constitute evaluation of an activity. After practice, a student should arrange to demonstrate competency of demonstrated activities with the instructor.
3. Check off lists signed by the instructor may be presented to the clinical coordinator before the correlated clinical activity may be undertaken.
4. Failure to secure successful lab evaluations will prevent the student from completing clinical activities necessary for successful completion of the course.

Texts

Association of Surgical Technologists, Inc. Surgical Technology for the Surgical Technologist.
Delmar. Albany, NY: 2001.

Miltex Instrument Company: Surgical Instruments.

Beckett, Brent J., Identifying Surgical Instruments, 3rd ed. 1999.

Recommended Texts (available at the bookstore)

Goldman, Maxine: Pocket Guide to the Operating Room, F.A. Davis

Miller and Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health, Latest edition, W.B. Saunders

Gruendemann, Meeker:

Alexanders Care of the Patient in Surgery, Latest edition, C.V. Mosby.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY A

Focus: Donning Surgical Attire

Objective: Proper donning of surgical attire to include cap, shirt, pants, shoe covers, protective eyewear, and masks.

Content:

1. Obtaining proper surgical attire and cap.
2. Changing from "street clothes" in the dressing room to scrubs.

Clinical correlation: Clinical activity 1

Activities:

1. Demonstration by instructor
2. Read: AST, p. 89-90, 239-242
3. View film Pre-operative Preparations

Evaluation	Need Improvement	Acceptable
1. Obtain proper sized scrubs - shirt and pants 2. Obtain cap, put on first, cover all hair, don scrubs 3. Obtain and put on shoe covers over surgical shoes 4. Remove jewelry - rings and watch may be pinned to shirt or tied to scrub pants; all other jewelry must be left at home or in locker. 5. Obtain mask, apply over nose pitching metal strip to form, tie top ties, then bottom ties 6. Obtain and put on protective eyewear		

Comments: _____

Instructor's Signature

Tech Tip: 1. OR cap should be put on (donned) first to avoid allowing hair and scalp flakes to fall onto scrub attire.
2. The OR shoes ARE NOT worn outside of the clinical facility.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY B

Focus: Introduction to the Operating Room.

Objective: Orientation and identification of furniture and placement in the operating room.

Content:

1. Introduction to surgical laboratory.
2. ST 105 Syllabus

Clinical correlation: Clinical activity 1

Activities:

1. Orientation by instructor.
2. Read: AST, p. 58-64
3. View Film OR Supplies, Instruments, and Equipment

Evaluation	Need Improvement	Acceptable
<p>1. Identify and properly place in the operating room:</p> <ul style="list-style-type: none">▪ Ring stand▪ Mayo stand▪ Kick bucket▪ Back table▪ Surgical table and accessories▪ IV pole▪ Step stool▪ X-ray view box▪ Cautery machine▪ Suction▪ Anesthesia machine▪ OR lights▪ Prep Table		

Comments: _____

Instructor's Signature

Tech Tip: Remove excess OR furniture from the room - this allows more space for the setup and decreases the chances of contamination.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY C

Focus: Surgical hand scrub.

Objective: Demonstrate a surgical hand scrub following principles of asepsis.

Content:

1. Hand scrubbing procedures

Clinical correlation: Clinical activity 2

Activities:

1. Read: AST, p. 246-249
2. View film: "Scrubbing, Gowning, and Gloving" and CD ROM "Aseptic Technique"
3. Instructor demonstration and practice.

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Check hands and arms for cuts or infections. Fingernails should be short, free from polish and/or artificial nails2. Turn on water to moderate flow and adjust water temperature. Avoid touching faucets throughout completion of procedure3. Wet hands and arms, apply antimicrobial soap and lather from fingertips to 2" above elbows.4. Rinse hands and arms. Open sterile scrub brush and obtain nail file. Clean each fingernail under running water5. Using sterile scrub brush, apply antimicrobial soap and scrub nails on both hands (30 strokes on each hand) Note: A stroke is considered on back and forth motion.6. Scrub from fingertips to 2" above elbows using the timed method as demonstrated: 1 ½ minutes per each hand, 1 minute on each arm.7. Rinse hands and arms with a unidirectional motion, fingertips first, then arms. Keep hands higher than elbows.8. Turn off water; if applicable, hold arms over sink with hands elevated to allow excess water to drain off elbows. Proceed to OR holding hands above waist. 9. Repeat steps 1-5. Scrub from fingertips to 2" above elbows used the counted stroke method as demonstrated: 20 strokes each side of fingers, hands and arms. Proceed with steps 7 and 8.		

Comments: _____

Instructor's Signature

- Tech Tip:**
1. The rule of direction for the surgical hard scrub is fingertips to elbows.
 2. Skin CANNOT be sterilized.
 3. Once hands and arms are scrubbed, they must remain above the waist, below the chest, and IN VIEW at all times.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY D

Focus: Drying Hands after Surgical Scrub.

Objective: Drying hands after surgical scrub using aseptic technique.

Content: Proper drying of hands

Clinical correlation: Clinical activity 2

Activities:

1. Read: AST, P. 246-249
2. View film "Scrubbing, Gowning, and Gloving." and CD ROM "Aseptic Technique"
3. Instructor demonstration and practice

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. With one hand, pick up sterile towel by "pinching" it from the top. Lift it straight up and away from gown pack without touching gown or dripping water onto pack.2. Step away from sterile field, continue to face it, bend at waist so towel DOES NOT TOUCH scrubs as it unfolds.3. Using ½ of towel, begin at fingertips and dry up to 2" above elbow of first hand with blotting, rotating motions. Note: Do not return to an area once it is dried4. Grasp opposite ½ of towel and repeat steps to dry other hand and arm.5. Discard towel as appropriate. Keep hands above waist and in view at all times.		

Comments: _____

Instructor's Signature

Tech Tip: If the drying towel touches the scrub attire, drop the towel immediately and obtain another.

COLLEGE LABORATORY GUIDE
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ACTIVITY E

Focus: Gowning and Gloving

Objective: Gown and glove self and a team member following aseptic technique.

Content:

1. Donning surgical gown
2. Closed method of gloving
3. Open method of gloving
4. Gloving of team member

Clinical correlation: Clinical activity 9

Activities:

1. Read: AST, p. 248-255
2. View film "Scrubbing, Gowning, and Gloving" CD ROM "Aseptic Technique"
3. Instructor demonstration and practice

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none"> 1. With one hand, grasp inside front of gown, lift straight up and away from sterile field. Do not touch wrapper. 2. Step away from field, lift gown to shoulder height, allow to unfold. Keep inside of gown towards body. Note: Do not touch outside of gown with bare hands 3. Place hands into arm holds and guide arms through sleeves. Be careful not to extend fingertips outside of gown cuff 4. Don gloves using closed method as directed: open glove wrapper, remove glove, place on gown cuff with palm of glove on palm of hand. Glove fingers toward elbow. Insert cuff and pull glove onto hand. Repeat with other hand. 5. Repeat steps 1-3. Don gloves using open method as directed. Hands extended through cuffs, grasp inside cuff of first glove with thumb and forefinger and pull onto hand. Do not touch cuff. Slide gloved fingers into cuffed outer portion of second glove and guide onto hand. Turn glove ends down to "catch" the gown cuffs. Note: Remember glove to glove, skin to skin principle 6. One gowned and gloved, prepare to gown and glove a team member by opening hand towel and dropping it over his/her extended hand. Do not touch the person nor his/her hands. 7. Grasp sterile gown from outside and allow it to unfold in an open area away from the sterile backtable. 8. Keep hands in the outside of gown under a protective cuff of the neck and shoulder area. Offer the inside of the gown to team member. He/she slips arms into the sleeves. Release gown. Note: Circulator will pull gown on from back non sterile side and tie. 		

<p>9. Pick up right glove under cuff. Turn palm of glove toward team member. Place fingers under glove cuff and spread them to create an opening. Allow team members to place hand into glove. Exert upward pressure on cuff as team member inserts his/her hand.</p> <p>10. Bring glove cuff well over the gown cuff and release. Repeat with other glove</p>		
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Comments: _____

 Instructor's Signature

Tech Tip: When putting on (donning) or removing gloves, the rule is skin to skin and glove to glove.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY F

Focus: Vital Signs in the Circulating Role.

Objective: Monitor the vital signs of a preoperative and postoperative patient.

Content:

1. Pulse
2. Temperature
3. Respirations
4. Blood pressure

Clinical correlation: Clinical activity 16

Activities:

1. Read: AST, p. 129-133
2. Demonstration by instructor
3. View films "Vital Signs"
4. Practice
5. Obtain and record vitals on assigned partner

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Assemble equipment and wash hands2. Identify patient (partner) and explain procedure3. As demonstrated obtain and record radial pulse using first two fingers over radial artery of patients wrist, hold and count for one full minute. Note: Do not use your thumb as it has a pulse of its own.4. As demonstrated, obtain and record respirations using watch or room clock to count rise and fall of chest for one full minute.5. As demonstrated, obtain and record temperature using an oral mercury thermometer under the tongue for 3 minutes6. As demonstrated, obtain and record blood pressure using a stethoscope and sphygmomanometer to locate the brachial artery "pulse"7. Wash hands when task is completed.		

Comments: _____

Instructor's Signature

Tech Tip: Always make sure equipment is functioning before using on the patient.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY G

Focus: Identification and transportation to the operating room in the non scrubbed role.

Objectives:

1. Demonstrate identification and preop check of the patient.
2. Demonstrate review of the chart.
3. Demonstrate moving preoperative patient onto a stretcher.
4. Demonstrate safe transportation of a patient to surgery.
5. Demonstrate moving a patient from a stretcher to the OR table.

Content:

1. Identification of surgical patient
2. Transportation to the OR
3. Moving patient to the OR table

Clinical correlation: Clinical activity 17

Activities:

1. Read: AST, p. 119-124
2. View film "Transportation of the Patient to the Operating Room"
3. Demonstration by Instructor and class
4. Practice and Role Playing

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Obtain patient's info from charge nurse, get stretcher, put on cover gown and shoe covers2. Go to floor, get patient's nurse, proceed to room and verify patient's I.D. and preop check3. Review patient's chart for completeness4. Safely transfer patient from hospital bed to OR stretcher and transport to OR department5. Check patient in, remove your cover gown and change shoe covers, put hat on patient and other "coverings" as needed.6. When notified, transport patient to operating room and check in with circulator.7. With circulator, transfer patient to OR bed, secure safety straps, remove stretcher, and leave room.		

Comments: _____

Instructor's Signature

Tech Tip: Once patient is on the OR table, unlock stretcher, move it away AND immediately move to stand next to the patient's bedside. Remain there until all safety straps are secured.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY H

Focus: Positioning surgical patients on the operating room table in the circulating role. Placement of ESU pad.

Objective: Demonstrate surgical positioning of patients. Demonstrate proper placement of ESU grounding pad.

Content:

1. The operating room table and fracture table.
2. Positioning surgical patients
3. Placement of ESU pad, machine, and foot pedal
4. Safety considerations

Clinical correlation: Clinical activity 7

Activities:

1. Read: AST p. 124-133, 202-204
2. Demonstration by instructor and class
3. Practice, role playing
4. View film, "Positioning the Surgical Patient" and "The Champaign Fracture Table"

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Before patient enters room test OR table to make sure it is working properly, assemble all necessary equipment and obtain and apply clean sheets, lifter, etc to table.2. Check electrosurgical unit (ESU), prepare grounding pad so it is ready for patient.3. As demonstrated, position the patient on the bed in supine\Dorsal recumbent.4. As demonstrated, position the patient on the bed in Trendelenburg.5. As demonstrated, position the patient on the bed in Reverse Trendelenburg.6. As demonstrated, position the patient on the bed in Kraske.7. As demonstrated, position the patient on the bed in Lithotomy.8. As demonstrated, position the patient on the bed in Fowler's\Semi Fowler's.9. As demonstrated, position the patient on the bed in Simms.10. As demonstrated, position the patient on the bed in Prone and Knee-chest.11. As demonstrated, position the patient on the bed in Prone with Wilson frame.12. As demonstrated, position the patient for a spinal anesthetic.13. Demonstrate appropriate safety precautions as necessary for each procedure as: padding bony prominence, watching for hyper extension of joints, covering all tables and arm boards, moving patient by keeping body aligned, support head, wait for anesthesia to give "go ahead."		

<p>14. Use proper body mechanics and have sufficient number of people to position patient in order to avoid injury to employees.</p> <p>15. Properly apply ESU pad to patient's upper thigh or other appropriate (well padded) area. Once procedure begins, position ESU machine and foot pedal - hook up cords.</p> <p>16. Demonstrate appropriate positioning on a fracture table</p>		
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Comments: _____

_____ Instructor's Signature

- Tech Tip:**
1. NEVER allow a patient's skin to touch a bare surface.
 2. Always attach grounding pad cord first to machine (before the pencil cord) and unplug it last (after the pencil cord is unplugged).
 3. Make sure patient's feet are not crossed.
 4. Always obtain anesthesia personnel's permission before moving a patient.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY I

Focus: Learning field trips to the Learning Resource Center and Good Samaritan Hospital Surgery.

Objective: Acquire knowledge necessary to utilize the LRC for research papers and become familiar with a working hospital Operating Room.

Content:

1. Field trips to both facilities.
2. Information and guided tours at both facilities.

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Participation in trip to LRC<ol style="list-style-type: none">a. Info on computer accessb. Info on medical referencesc. Info on student assistance by LRC staff2. Participation in trip to Good Samaritan<ol style="list-style-type: none">a. Don proper attire in dressing roomb. Scrub at sinksc. Identify furniture and accessory equipment in OR roomsd. Info on warmers, autoclaves, steris, laminar flowe. Info on OR suite layout and schedule board		

Comments: _____

Instructor's Signature

Tech Tip: The best learning resources in the universe won't help if you don't utilize them.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY J

Focus: Preoperative Shave Prep in the circulating role.

Objective: Demonstrate procedure for performing a preoperative shave prep.

Content:

1. Procedure for shave preps
2. Methods and steps for shave preps
3. Safety considerations for the patient

Clinical correlation: Clinical activity 18

Activities:

1. Read: AST, p. 134-138
2. Instructor demonstration
3. Role play - preoperative shave for knee surgery using beds in LPN lab and mock shaves of mannequins

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Obtain and don cover gown and shoe covers. Obtain shave prep kit and patient information2. Identify patient (partner) and explain procedure at bedside3. Assemble needed supplies, wash hands, ensure patient privacy.4. Perform shave prep for arthroscopy of right knee using techniques as demonstrated.5. Clean up area, properly dispose of supplies6. Repeat steps for mock appendectomy on mannequin		

Comments: _____

Instructor's Signature

Tech Tip: Use warmed prep solutions and water on the awake patient.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY K

Focus: Scrub prep of the surgical site in the circulating role.

Objective:

1. Identify correct prep sites for procedures.
2. Demonstrate open gloving to preps
3. Demonstrate a flat surface prep.
4. Demonstrate a limb prep.
5. Demonstrate perineal prep.
6. Identify dirty areas.

Content:

1. Procedure for a scrub prep and donning gloves
2. Non flat and flat surfaces
3. Important considerations
4. Dirty areas

Clinical correlation: Clinical activity 7

Activities:

1. Read: AST, p. 134-138
2. Instructor demonstration with fellow students and mannequins
3. Practice

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Identify prep areas for procedures: Abdominal, vaginal, lumbar, back, extremities, neck, face, chest, and rectal.2. Assemble prep supplies, verify prep site, check chart for allergies, verify patient ready per anesthesia (or patient if local)3. Open prep kit and pour solutions using aseptic technique. Expose prep site, adjust lights. Note: This must be accomplished before sterile gloves are donned4. Don sterile gloves using open method, but do not "turn cuffs" as you do not have on a sterile gown. Note: skin to skin and glove to glove principle.5. Arrange supplies within kit, avoid touching open wrapper edges which are non sterile. block off area with towels.6. Take out sponge with antimicrobial soap, begin at incision, circular motions extending outward to cover prep area. If abdominal prep, clean umbilicus first before beginning scrub. Discard sponge. Note: never go back over previously prepped area. Do dirty areas last.7. Prep continues with next sponge for a total of 5 or 10 minutes depending upon procedure and doctor's preference		

<ol style="list-style-type: none"> 8. Dry area by lying towel over area and blotting. Use two hands to remove towel. Don't drag it. 9. If applying antiseptic solution (paint) begin at the incision and work outward as with scrub 10. Dry if applicable, discard/count sponges according to policy. Discard prep kit. Remove gloves in appropriate manner. 11. Demonstrate prep for an extremity 12. Demonstrate prep for an abdominal procedure 13. Demonstrate prep for an vaginal procedure 14. Demonstrate prep for a hernia. 		
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Comments: _____

 Instructor's Signature

Tech Tip: Always check patient's chart for allergies, especially for Iodine and Shellfish.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY L

Focus: Selecting supplies for a procedure in the non scrubbed role.

Objective:

1. Demonstrate use of physician's preference card
2. Demonstrate selection of supplies for a procedure.

Content:

1. Physician's preferences
2. Selecting supplies

Clinical correlation: Clinical activity 8

Activities:

1. Read: Lecture notes, AST, p. 256-260
2. Demonstration by instructor and examples
3. Practice

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none"> 1. Make up a doctors preference card as instructed. 2. Use preference card to pull for procedure by pulling card going to CS and room cabinet and pulling supplies for procedure 3. Check supplies and preference card - what is to be opened, what is "have in room." 		

Comments: _____

Instructor's Signature

Tech Tip: Pull supplies which "out date" the soonest when possible to help rotation. Always check expiration date, sterilization indicators, and package integrity.

Surgeon:	Procedure:
Glove size:	Position of patient:
Skin prep:	Drapes:
Sutures & Needles	Instruments & Supplies
Ties: Peritoneum: Fascia: Muscle: Sub-Q: Retention: Skin: Other: <hr/>	
Dressing: <hr/>	
Mayo Stand Set up:	Draping Order:
Surgeon's Special Requests:	Equipment / Positioning Aides / Furniture:

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY M

Focus: Surgical draping of OR furniture in scrubbed role.

Objective:

1. Demonstrate draping backtable
2. Demonstrate draping Mayo stand
3. Demonstrate preparing the sterile field

Content:

1. Basic principles of asepsis.
2. Types of drapes
3. Draping procedure

Clinical correlation: Clinical activity 8, 9

Activities:

1. Read: AST, p. 256-260
2. Demonstration by instructor
3. Practice

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none"> 1. Remove drapes and supplies from backtable to reinforce drape (if applicable) 2. Replace supplies to proper place on backtable. Obtain Mayo drape from supplies and drape Mayo by placing foot on base of Mayo stand and pushing drape into stand. Protect gloved hands in Mayo stand cover folded cuff. 3. Tuck excess corner edges under stand tray, place towel over top of tray. 4. Fold towel to place on top of mayo for instruments. Note: If sterile, remain on the inside or on top of sterile items principle 		

Comments: _____

Instructor's Signature

Tech Tip: When scrubbed, always keep gloved hands on top of and inside of sterile field (drapes).

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY N

Focus: Surgical draping of the patient in the scrubbed role.

Objective:

1. Demonstrate standard four (4) towel drape (laparotomy).
2. Demonstrate orthopedic draping
3. Demonstrate head draping
4. Demonstrate lithotomy draping

Content:

1. Basic principles
2. Types of drapes
3. Draping procedure
4. Aseptic technique

Clinical correlation: Clinical activity 12

Activities:

1. Read: AST, p. 256-260
2. Demonstration by instructor
3. Practice, role playing
4. View film, "Draping the Orthopedic Patient"

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none"> 1. Fold towels with cuffs - 3 away and 1 toward you. Hand to surgeon. Hand towel clamps if needed. 2. Hand Steri-drape (if used) and drape sheets as appropriate for site. 3. Cuff drapes to protect gloved hands from non-sterile areas - allow drapes to fall over edges and keep hands above waist. 4. If using procedural drapes - place slit opening over operative site. 5. Demonstrate a head drape 6. Demonstrate an extremity drape 7. Demonstrate a laparotomy drape 8. Demonstrate a lithotomy/cystodrape 		

Comments: _____

Instructor's Signature

Tech Tip: 1. Always check with anesthesia personnel for permission before draping the patient.
2. Once a drape is laid, it stays.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
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ACTIVITY O

Focus: Beginning the procedure in the sterile role.

Objective:

1. Pull up Mayo with instruments, sponges and light handles
2. Hook up appropriate equipment on field
3. Place sponges at site and hand scalpel to surgeon

Content:

1. Mayo stand to appropriate place at field
2. Types of equipment to be hooked up
3. Supplies needed to begin procedure

Clinical correlation: Clinical activity 8, 9, 10

Activities:

1. AST, p. 265-270
2. Handouts
3. Demonstration by instructor with class
4. Practice and role playing

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none"> 1. Pull up Mayo stand to appropriate site at the field 2. Anchor cautery pencil (ESU) with protector on field. Allow enough cord for surgeon's use. Hand end off to circulator. "Stick" scratch pad at site. Make sure proper tip is inserted into pencil. 3. Connect suction tubing to suction tip, anchor tubing and tip on field. Allow enough tubing for surgeons use. Hand end off to circulator. 4. Place two sponges at incisions site, attach light handles (or hand them to surgeon to attach) handle scalpel to surgeon. 		

Comments: _____

Instructor's Signature

- Tech Tip:**
1. Pull Mayo up to field and immediately hand suction tubing, cautery pencil and light handles to surgeon - this gives you time to bring your table around, place sponges, and prepare to begin.
 2. If catheters are on your table, always check balloons or trach tubes.

COLLEGE LABORATORY GUIDE
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ACTIVITY P

Focus: Opening Sterile Supplies in circulating role. Tying up surgical gowns
Documentation in the circulating role

Objective:

1. Opening sterile supplies observing sterile technique
2. Opening supplies to scrub person or onto sterile area.
3. Pouring solutions.
4. Tying the sterile scrub's surgical gown
5. Identifying and evaluating surgical documentation

Content:

1. Opening linen wrappers, paper and plastic wrappers.
2. Handing sterile supplies to scrub person
3. Placing sterile supplies on sterile area.
4. Pouring solutions into proper containers.
5. Opening bundles and gown pack.
6. Tying the sterile scrub's surgical gown.
7. Identifying and evaluating surgical documents

Clinical correlation: Clinical activity 5

Activities:

1. Read: AST, p. 80-91, 243-246
2. Practice
3. View film "Aseptic Technique: Stressing the Fundamentals" CD ROM "Aseptic Technique"

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none"> 1. Inspect all packages for integrity, expiration date, strike through contamination, and indicator type. If unacceptable, obtain new item 2. Remove outer (dust) cover if applicable and hold inner package in hand or place package on a non-sterile surface (table, Mayo stand, prep table, etc.) 3. Remove tape, lift flap away from you first if hand held and always toward you if package on table. Note: Avoid reaching across a sterile field. 4. Open all four flaps of package. Keeping your hands on outside of package. If peel package grasp package edges with both hands and pull apart. Note: If non-sterile - remain on the outside or underneath sterile items principle. 5. Check sterility indicators on inside of package (if possible) 6. Flip sterile item onto sterile field or "hand" it to scrubbed person. If a peel package - use a steady even pressure while pulling package edges apart. <ol style="list-style-type: none"> 1. Obtain a bottle of solution, check expiration date and twist seal to remove cap. Remove cap without touching rim or lip of bottle. 2. Hold bottle approximately 12" from sterile container rim overlapping sterile rim of bottle to edge of container. Pour 		

<p>solution, avoid dripping down bottle or onto table by giving bottle a "dip" to finish delivering solution.</p> <p>3. Discard bottle and any remaining solution. It can not be reused.</p>		
<p>1. Reach inside gown shoulder and pull gown onto scrubbed team members arms and shoulders.</p> <p>2. Tie inside tie, fasten neck fasteners, and tug gown bottom.</p> <p>3. Receive the tie from scrubbed person. Stand safe distance away so person turns around. Pull off tab.</p>		

Comments: _____

_____ Instructor's Signature

Tech Tip: 1. When non-scrubbed, always keep hands underneath and on the outside of the sterile field (drapes.)
 2. When opening sterile packages, the flap away from you is first - the flap toward you is last.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY Q

Focus: Catheters, drains, and collection systems - non scrubbed role

Objective:

1. Identify for use catheters, drains, and collection systems.
2. Demonstrate catheterization.
3. Connect Hemovac, Jackson Pratt, and chest drainage system.

Content:

1. Urinary catheters.
2. Other drainage catheters
3. Collection systems, types and usage
4. Aseptic technique - catheterization.

Clinical correlation: Clinical activity 13

Activities:

1. Read: AST, p. 133-134, 141, 209-211
2. Demonstration by instructor
3. Role playing, catheterization of mannequin
4. View films "Catheterization"

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none"> 1. Identify urinary catheters by types and usage 2. Identify drainage catheters by types and usage 3. Identify drains by types and usage 4. Identify collection systems - properly connect 5. Compress collection bulb or prepare seal chamber and connect drain to its collection unit. Do not touch inside of tubing or unit. 6. Close part and apply dressing (to incision and) around drain. Tape securely. 7. Demonstrate catheterization on mannequin, male and female 		

Comments: _____

Instructor's Signature

- Tech Tip:**
1. Wash hands initially and when gloves are removed.
 2. If you encounter difficulty inserting the catheter, discontinue task and consult the surgeon.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY R

Focus: Dressings, sponges, and packing.

Objective:

1. Identify dressings, sponges, and packing.
2. Demonstrate proper use of surgical sponges
3. Demonstrate application of routine dressing.

Content:

1. Dressing sponges and uses by layers
2. Surgical gauze
3. Surgical laps.
4. Packing.

Clinical correlation: Clinical activity 13, 15

Activities:

1. Read: AST, p. 207-208, 220-221
2. Demonstration of uses by instructor
3. Practice-role playing

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Identify each of the following types of sponges<ol style="list-style-type: none">a. Plainb. Radiopaquec. Peanutd. Laps2. Properly load a sponge forceps using a rraytec sponge in scrub role3. Identify the following dressing layers and examples of each<ol style="list-style-type: none">a. Inner dressingsb. Intermediate dressingsc. Outer dressingsd. Special dressings4. Apply dressings in the scrubbed role by cleansing area with sterile saline on a sponge to remove blood and prep solutions. Then dry area with second sponge5. Apply appropriate dressing per surgeons preference.6. Apply tape in the circulating role as required		

Comments: _____

Instructor's Signature

- Tech Tip:** 1. Radiopaque sponges should not be used as dressing.
2. Dressings should not be opened onto the backtable until the final count is completed.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY S

Focus: Receiving drugs onto a sterile field in the scrubbed role. Delivering drugs to the sterile field in circulating role.

Objective:

1. Demonstrate the method to identify and transfer drugs to the sterile field

Content:

1. Identification of medications
2. Techniques for transferring meds onto the sterile field

Clinical correlation: Clinical activity 15

Activities:

1. Lecture notes, Read: AST, p. 156-157
2. Demonstrations by instructor
3. Practice and role playing

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Uses proper aseptic technique in identifying and receiving a drug solution poured into a container as scrub2. Uses proper aseptic technique in identifying and pouring a drug/solution into a container as circulator.3. Uses proper aseptic technique in identifying and aspirating a drug from a vial.4. Labels and identifies all medicines on backtable as scrub5. Keeps all medicine vials and containers in view and accessible as circulator		

Comments: _____

Instructor's Signature

Tech Tip: In the scrub role - do not discard sterile medicine vials, keep on back table for reference.
In the circulating role - do not discard medicine vials, keep in room for reference.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY T

Focus: Operating Room Sanitation in the non scrubbed role.

Objective: Demonstrate proper routine for cleaning and disinfecting the operating room and equipment.

1. Initial daily cleaning
2. Between cases cleaning
3. Terminal decontamination

Content:

1. Methods of disinfection
2. Disinfection procedures

Clinical correlation: Clinical activity 4

Activities:

1. Read: AST, p. 114-117
2. Demonstration by instructor
3. Practice and end of 10 week period - terminal disinfection of lab (OR).

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none"> 1. Performs initial daily disinfection of lab "operating room" 2. Performs between case disinfection of lab "operating room" 3. Performs terminal decontamination of lab "operating room" 		

Comments: _____

Instructor's Signature

- Tech Tip:**
1. Always wear non-sterile gloves to clean.
 2. Look for blood splatters on lights, walls, floors, and ceiling - don't forget the wheels on kickbuckets.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY U

Focus: Steam Sterilization of surgical supplies in the non-scrubbed role.

Objective:

1. Prepare linen supplies
2. Wrap packs for sterilization
3. Sterilize supplies using the steam autoclave

Content:

1. Linen supplies in surgery
2. Wrapping and packaging
3. Sterilize supplies using the steam autoclave

Clinical correlation: Clinical activity 3

Activities:

1. Read: AST, p. 104-110
2. Demonstration by instructor'
3. Practice
4. View film, "in Hospital Sterilization"

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Wrap item for sterilization with a linen or paper wrapper. Place indicator strip in/on items. Use at least 2 thickness of wrappers.2. Grasp corners of wrapper and bring over to cover item as demonstrated, seal with indicator tape and label with item identification, your initials, and expiration date.3. Place item into steam sterilizer (autoclave) in central supply as demonstrated.		
<ol style="list-style-type: none">1. Operate a high speed steam sterilizer (autoclave) by placing unwrapped instruments into tray.2. Place indicator strip in tray, close and lock autoclave door.3. Set timer and temperature as directed (most are preset in the clinical sites) Start autoclave4. When cycle completed, signal will sound. Check graph or printout to verify autoclave reached correct temp and times. Open door slowly.		

Comments: _____

Instructor's Signature

- Tech Tip:** 1. Check wrapper integrity before wrapping package.
2. Make sure wrapper is of adequate size for the item.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY V

Focus: Sutures, needles, and suturing.

Objective:

1. Identify types of needles and sutures
2. Demonstrate opening suture packets and loading of ligatures in the scrubbed role
3. Thread a free needle
4. Demonstrate tying, tagging, and cutting of sutures in the scrubbed role
5. Demonstrate use of auto suture equipment in the scrubbed role

Content:

1. Types of needles and their uses
2. Opening suture packets and loading suture
3. Load and thread a free needle
4. Tying and cutting suture.
5. Types of suturing material
6. Passing free tie
7. Suture with auto suture.

Clinical correlation: Clinical activity 13

Activities:

1. Read: AST, Chapter 8
2. Identify needles and suture types.
3. Practice - role playing with wound and appendix models in the scrubbed role

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Identify2. Load and pass suture ligature3. Tie, tag, and cut sutures4. Passing free tie5. Identify and properly use auto suture		

Comments: _____

Instructor's Signature

- Tech Tip:**
1. Do not lean over a sterile field to flip sutures.
 2. Thread needles from the outside in.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY W

Focus: Sponge, needle and instrument counts in scrubbed and circulating role.

Objective:

1. Demonstrate procedure for sponge counts.
2. Demonstrate procedure for instrument counts
3. Demonstrate procedure for needle and sharp counts.

Content:

1. Demonstrate protocol for sponge counts
2. Demonstrate protocol for instrument counts
3. Demonstrate procedure for needle and sharp counts

Clinical correlation: Clinical activity 13

Activities:

1. Read: AST, p. 270 - 272
2. Demonstration by instructor
3. Practice, role playing
4. View film, "Sponge, Needle, and Instrument Counts"

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Demonstrates correct procedure for sponge count2. Demonstrates correct procedure for needles/sharps counts3. Demonstrates correct procedure for instrument counts		

Comments: _____

Instructor's Signature

- Tech Tip:**
1. Count on field first, then Mayo/backtable, then off the field last.
 2. Always be aware of sponges and needles, do not wait until first closing count.
 3. As the scrub, always open sponges before throwing them off the sterile field.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY X

Focus: Instrumentation.

Objective:

1. Demonstrate knowledge of surgical instrumentation
2. Identify surgical instruments
3. Assemble instruments
4. Demonstrate correct passing of surgical instruments
5. Demonstrate safe handling of sharp instruments
6. Demonstrate knowledge of surgical hand signs
7. Demonstrate techniques for retractor usage/tissue exposure

Content:

1. Types of instruments
2. Passing of instruments
3. The scalpel
4. Hand signs
5. instrument pack
6. Applying and holding retractors

Clinical correlation: Clinical activity 4

Activities:

1. Read: AST, Chapter 7
2. Practice passing instruments with class members
3. Identify instruments by sight
4. Assemble abdominal instrument set
5. Identify specialty instruments

Evaluation	Need Improvement	Acceptable
<ol style="list-style-type: none">1. Passes instruments:<ol style="list-style-type: none">a. Clampsb. Scalpelc. Retractors - apply and hold2. Name instruments in abdominal set3. Assemble abdominal instrument set4. Identify vascular instruments5. Identify GI instruments6. Identify thoracic instruments7. Identify OB/GYN instruments8. Identify ENT instruments9. Identify orthopedic instruments10. Identify neuro instruments		

11. Wraps sets for sterilization		
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Comments: _____

Instructor's Signature

- Tech Tip:**
1. Always check that instruments are in proper working order and that screws, tips, etc., are in place and secure before the incision is made.
 2. Pass instruments decisively and in the position of use.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION

ACTIVITY Y

Focus: Dressing the surgical wound and "end of case" routine in the scrubbed and circulating role.

Objective:

1. Demonstrate the dressing of a surgical wound using aseptic techniques
2. Demonstrate proper removal of drapes
3. Demonstrate proper removal of gown and gloves
4. Demonstrate instrument care at the end of a procedure
5. Demonstrate patient transfer to a stretcher
6. Demonstrate proper specimen identification and handling

Content:

1. Application of the dressing
2. Disassembling the sterile field
3. Contamination confinement.
4. Instrument care.
5. Specimen handling

Clinical correlation: Clinical activity 15

Activities:

1. Read: AST, p. 271-273
2. Demonstration by instructor
3. Practice, role playing

Evaluation	Need Improvement	Acceptable
1. Using aseptic technique, clean site of blood, dry and apply a dressing to a surgical wound circulator will apply non sterile out dressing 2. Properly identify, label, and delivery of the surgical specimen to pathology 3. Aseptically remove drapes, unhook equipment 4. Aseptically remove gown and discard 5. Aseptically remove gloves and discard 6. Aseptically remove table drapes at appropriate time 7. Demonstrate patient transfer, from operating table to stretcher, with anesthesia permission and proper number of personnel, transfer to recovery in the circulating role. Note: Steps 3-7 are performed after the patient has left the room, or according to hospital policy.		

Comments: _____

Instructor's Signature

- Tech Tip:**
1. Always check the surgeon's face, mask, and hat for blood before he/she goes to talk with the family.
 2. Stay sterile until the patient leaves the room.
 3. No trash is removed from the room until the end of a procedure.
 4. The scrub will wash the surgical site with a "sloppy wet" sponge, then dry with a sponge before dressing is applied.

Date _____

Student Name _____

COLLEGE LABORATORY GUIDE
ST 105 SURGICAL TECHNOLOGY I APPLICATION
ACTIVITY Z

Focus: "DRESS REHEARSAL".

Objective: Role playing from any of the activities previously learned and practiced in the college lab.

Content: A series of tasks will be given to each individual student which must be correctly performed within 4 attempts. The student will be evaluated by the instructor and critiqued by the other students.

Activities:

1. Role playing

Evaluation	Need Improvement	Acceptable
1. Full participation and correctly accomplishing tasks.		

Comments: _____

Instructor's Signature

Tech Tip: There is a reason for every action in surgery. Always adhere to aseptic technique to keep microorganisms to an irreducible minimum in the OR.