

# Surgical Technology

<b>Dress Code</b>	Attire appropriate to the occupational area or other appropriate dress
<b>Student Orientation</b>	<ul style="list-style-type: none"> <li>- Explain the event to the students and that you will hand out individual timecards. Students will return to the event room at least 5 minutes before their allotted time. Students will have a secret scenario to solve when it is their turn to compete. Students not share the secret scenario when they leave the event as it is an automatic disqualification.</li> <li>- Ask for student questions</li> <li>- Distribute appointment times to all students</li> </ul>
<b>Round # 1</b>	Competitors must submit technical skill video to Montana HOSA by deadline. There is no online test for this event.
<b>Scoring</b>	Combined scores from the ratings sheets will be used to determine top 3 competitors.

### Official References:

Atkinson, Lucy Jo. Berry & Kohn's Operating Room Technique, latest edition.  
 Mosby. Meeker and Rothrock. Alexander's Care of the Patient in Surgery, latest edition.  
 Mosby.Wells, M.P. Surgical Instruments: A Pocket Guide, latest edition

### Round 2 Skills:

Procedure I: Scrubbing

- A. Preliminary
- B. Major

Procedure II: Drying Hands

Procedure III: Gowning (self)

Procedure IV: Closed Gloving (self)

Procedure V: Drape Backtable - Mayo Stand

Procedure VI: Basic setup, including basic instruments. Establish an organized, functional sterile field for a specified surgical procedure; i.e., femoral hernia, appendectomy, mastectomy (State), inguinal hernia, laparotomy, breast biopsy, mastectomy (National)

Procedure VII: Gowning and Gloving Another Person

Procedure VIII: Remove Gown and Gloves (self)

Procedure IX: Identify Surgical Instruments

- A. Identify 25 instruments by name
- B. Spell names of instruments correctly
- C. Identify an acceptable surgical procedure use

### Competitors Must Provide

#### Round Two

- Writing utensil
- Sterile surgical gloves size 8 for gloving someone else
- Sterile surgical gloves of competitor's size
- Sterile gown
- Scrubbing equipment- brush w/detergent soap, impregnated sponge or brush and a file- metal or plastic
- Sterile towel
- Scrub suit/cap, mask, goggles or face shield, and shoe covers

The following pages include the exact rubrics competitors will be scored on. Competitors should practice and know these steps. They may be tested on 1-3 of these skill procedures.

# SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Procedure I      Scrubbing (Preliminary and Major Scrub)</b> <b>(Time for Procedures I-IX not to exceed 30 minutes)</b>	<b>Possible</b>	<b>Allocated</b>
I-A.      Preliminary Surgical Scrub		
1. Opened basic pack on backtable	3	
2. Opened gown pack on Mayo Stand	3	
3. Checked hands and arms for cuts, infections, etc.	1	
4. Checked fingernails -- clean, short, free of nail polish	1	
5. Removed all jewelry	1	
6. Adjusted cap or hood	1	
7. Adjusted goggles or protective eyewear	2	
8. Adjusted scrub shirt inside scrub pants	1	
9. Turned on water and regulated temperature	1	
10. Washed hands and forearms with antimicrobial soap for 30 seconds	5	
11. Rinsed thoroughly -- hands higher than elbows	5	
12. Cleaned fingernails under running water	5	
13. Discarded nail file	1	
<b>TOTAL POINTS -- PROCEDURE I-A</b>	<b>30</b>	

Items Evaluated	Possible	Allocated
I-B. Major Scrub - Five minutes - anatomical scrub using circular friction on all four surfaces of hands and arms		
1. Opened sterile brush/sponge -- held in hand during entire procedure	5	
2. Held brush/sponge perpendicular to nails -- scrubbed 30 strokes in a back and forth motion	2	
3. Brushed all four sides of each digit -- 10 strokes for each plane of each digit	2	
4. Brushed hand 40 strokes a. Back (10 strokes)	2	
b. Front (10 strokes)	2	
c. Inner side (10 strokes)	2	
d. Outer side (10 strokes)	2	
5. Scrubbed forearm from wrist to 2" above elbow, each side of arm including elbow and antecubital space a. Used light friction with circular motion		
b. Scrubbed arm to 2" above elbow	2	
6. Rinsed all visible lather from brush/sponge	2	
7. Transferred brush/sponge to opposite hand	2	
8. Holding brush/sponge perpendicular to nails of opposite hand, scrubbed 30 strokes -- each stroke was a back and forth motion	2	
9. Brushed all four sides of each digit -- 10 strokes for each plane of each digit	2	
10. Brushed hand 40 strokes a. Back (10 strokes)	2	
b. Front (10 strokes)	2	
c. Inner side (10 strokes)	2	
d. Outer side (10 strokes)	2	
11. Scrubbed forearm from wrist to 2" above elbow, each side of arm including elbow and antecubital space a. Used light friction with circular motion	4	

b. Scrubbed arm to 2" above elbow	2	
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<b>Items Evaluated</b>	<b>Possible</b>	<b>Allocated</b>
12. Discarded brush	2	
13. Rinsed arm scrubbed first thoroughly from fingertip to elbow, keeping hands higher than elbows	3	
14. Rinsed arm scrubbed last thoroughly from fingertip to elbow, keeping hands higher than elbows	3	
15. Turned off water and drained excess water from arms	1	
16. Proceeded to operation room		
a. held hands between waist and shoulder level	1	
b. held hands away from body	5	
<b>TOTAL POINTS -- PROCEDURE I-B</b>	<b>60</b>	

## SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Procedure II    Drying Hands</b>	<b>Possible</b>	<b>Allocated</b>
1. Picked up towel and held away from sterile field	2	
2. Did not let towel touch the gown	5	
3. Did not drop water onto gown or gowning table	5	
4. Stepped away from sterile field to wipe hands and arms	2	
5. Faced sterile field	2	
6. Bent slightly at waist	2	
7. Did not touch towel to unsterile scrub unit	5	
8. Dried one hand, forearm and elbow with blotting, rotating motions	5	
9. Did not return to an area already dried	5	
10.        Grasped the opposite end of towel with dried hand	5	
11.        Dried opposite hand, forearm and elbow with blotting, rotating motion	5	
12.        Did not return to an area already dried	5	
13.        Discarded towel	2	
14.        Kept hands in front and in view at all times	3	
<b>TOTAL POINTS -- PROCEDURE II</b>	<b>53</b>	

## SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Procedure III Gowning</b>	<b>Possible</b>	<b>Allocated</b>
1. Picked up gown by lifting straight up and away from sterile field without contaminating sterile field	2	
2. Stepped away from sterile field	2	
3. Remained facing sterile field	5	
4. Lifted gown to shoulder height	2	
5. Held gown away from body and allowed to open	2	
6. Put gown on by lacing hands in armholes	2	
7. Guided arms into sleeves by raising and spreading arms	2	
8. Kept hands inside cuff of gown	5	
9. Did not shake gown	2	
<b>TOTAL POINTS -- PROCEDURE III</b>	<b>24</b>	

## SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

Procedure IV	Closed Gloving (self)	Possible	Allocated
1.	For right hand, kept hands inside gown sleeve	5	
2.	Opened glove folder	2	
3.	With left hand inside sleeve, picked up right glove by cuff	2	
4.	Lifted glove up and away from sterile field	1	
5.	Held right arm with palm upward hand inside sleeve	2	
6.	Placed glove on right forearm		
	a. Fingers toward elbow	2	
	b. Thumb downward	2	
	c. Glove cuff touching upper edge of cuff	2	
7.	Grasped underside of glove cuff with the right hand	2	
8.	Grasped upper side of glove cuff with the left sleeve-covered hand	2	
9.	Pulled glove out and over cuff of sleeve	5	
10.	Grasped the top of the right glove and/or underlying sleeve with cuff-covered left hand	2	
11.	Pulled sleeve up and glove on	2	
12.	Extended fingers into proper finger slots	5	
13.	For left hand, picked up left glove with right gloved hand	2	
14.	Lifted glove up and away from sterile field	1	
15.	Held left arm with palm upward, hand inside sleeve	2	
16.	Placed glove on left forearm		
	a. Fingers toward elbow	2	
	b. Thumb downward	2	
	c. Glove cuff touching upper edge of gown cuff	2	



17.	Grasped underside of glove cuff with the left hand	2	
18.	Grasped upper side of glove with right gloved hand	2	

<b>Items Evaluated</b>		<b>Possible</b>	<b>Allocated</b>
19.	Pulled glove out and over cuff of sleeve	2	
20.	Grasped the top of the right glove and/or underlying sleeve with gloved right hand	2	
21.	Pulled glove out and over cuff of sleeve	5	
22.	Grasped the top of the right glove and/or underlying sleeve with cuff-covered left hand	2	
23.	Pulled sleeve up and glove on	2	
24.	Extended fingers into proper finger slots	5	
25.	Turned and tied own glove	5	
<b>TOTAL POINTS -- PROCEDURE IV</b>		<b>74</b>	

## SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Procedure V    Backtable - Mayo Stand</b>	<b>Possible</b>	<b>Allocated</b>
1. Arranged articles from basic pack in an organized manner on backtable	2	
2. Draped Mayo Stand		
a. Checked that stand was not too close to an unsterile field	1	
b. Checked cover for a wide cuff	1	
c. Kept hands under cuff at all times	3	
d. Slid covers over stand without contaminating hands or gown	3	
e. Prevented the folded end of cover from folding below backtable level	5	
f. Assured smoothness of cover on flat surface of tray	2	
<b>TOTAL POINTS -- PROCEDURE V</b>	<b>17</b>	

## SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Procedure VI    Establish a Functional, Organized Setup for a Basic Backtable and Mayo Stand for a Specified Procedure</b>	<b>Possible</b>	<b>Allocated</b>
<b>TOTAL POINTS -- PROCEDURE VI</b>	<b>100</b>	

## SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Procedure VII Gowning and Gloving Another Person</b>	<b>Possible</b>	<b>Allocated</b>
1. Gowning a. Opened hand towel and laid it on extended hand without contamination	5	
b. Handed gown to other person without contamination	5	
c. Released the gown without contamination	5	
2. Gloving a. Obtained gloves from circulator without contamination	5	
b. Picked up right glove with fingers under the cuff	2	
c. Held the palm toward the person	5	
d. Stretched cuff for introduction of hand without contamination	5	
e. Held glove steady while hand was plunged in	2	
f. Unfolded cuff of glove over cuff of sleeve, covering the entire cuff	5	
g. Repeated steps 2 through 6 for left glove	5	
h. Tied surgeon's gown	5	
<b>TOTAL POINTS -- PROCEDURE VII</b>	<b>49</b>	

## SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Procedure VIII Remove Gown and Gloves (self)</b>	<b>Possible</b>	<b>Allocated</b>
1. Removed gown first	5	
2. Grasped gown at shoulders without touching self	5	
3. Pulled downward, pulling sleeves inside out as pulled off arms	5	
4. Disposed of gown properly	3	
5. Removed gloves inside out using glove-to-glove then skin-to-skin technique	5	
<b>TOTAL POINTS -- PROCEDURE VIII</b>	<b>23</b>	

## SURGICAL TECHNOLOGY

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Procedure IX</b>	<b>Identify Surgical Instruments</b>	<b>Possible</b>	<b>Allocated</b>
1. Identified by proper surgical name		25	
2. Spelled instrument name correctly		25	
3. Classified instrument in correct category by use		25	
4. Identified an acceptable surgical procedure		25	
<b>TOTAL POINTS -- PROCEDURE IX</b>		<b>100</b>	

NOTE: A clarification statement and function is provided in each instrument category to assist with instrument identification. Since nomenclature for surgical instrument is not standardized, instruments classification will be selected from the textbook, Berry & Kohn's Operating Room Techniques, latest edition, by Lucy Atkinson. Instruments for Procedure X will be selected from the textbook, Surgical Instrument: A Pocket Guide, by M.P. Wells.

# SURGICAL TECHNOLOGY SURGICAL TECHNOLOGY

## SURGICAL INSTRUMENT IDENTIFICATION (Procedure X)

	Name of Instrument	Points (1 each for name & spelling)	Purpose or Use	Points (1 point for correct purpose/use)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Name of Instrument	Points (1 each for name & spelling)	Purpose or Use	Points (1 point for correct purpose/use)	
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
<b>TOTAL: ID &amp; Spelling (50 poss)</b>			<b>TOTAL: Purpose (25 poss.)</b>		



## SURGICAL TECHNOLOGY

### SOURCE LIST - SURGICAL INSTRUMENTS

#### Clamping/Occluding

Function: To apply crushing or noncrushing pressure by occlusion and clamping to provide hemostasis

Crile, straight

Crile, curved

Rankin, Schmidt Rochester-Peau, curved or straight

Rochester-Ochsner or Kocher, curved or straight

Mosquito, curved or straight

Lahey gall duct forceps

Right angle gallbladder forceps

Heaney hysterectomy forceps

Cottle double end Lauer, Guthrie hook

Rochester-Ochsner hysterectomy forceps

Pennington

Payr pylorus clamp

Kelly

Schmidt, Tonsil, or Adson

#### Holding/Grasping

Function: To grasp and hold without injury to surrounding tissues.

Tissue forceps with teeth

Tissue forceps without teeth

Russian forceps

Adson with and without teeth

Sponge forceps

Towel clamp

Allis forceps

Babcock forceps

Kidney stone forceps

Jacobs vulsellum

Uterine tenaculum

Singley dressing forceps

Ferris-Smith tissue forceps

Allis-Adair forceps

Potts-Smith tissue forceps

Cushing bayonet forceps

## SURGICAL TECHNOLOGY

### SOURCE LIST - SURGICAL INSTRUMENTS

#### Exposing/Retracting

Function: To pull aside muscles, tissues, and structures for operative exposure.

#### Malleable, Ribbon

Cushing, Sach's Vein  
Parker, Parker-Bard  
Army-Navy  
Richardson  
Volkman  
Deaver  
Balfour, self retaining with blades  
Weitlander  
Harrington  
Auvard speculum  
Green  
O'Sullivan-O'Connor  
Hollman-Cobra  
Mouth gag  
Goelet  
Senn  
Sims  
Gelpi  
Duckbill, Pederson, Graves speculum

#### Dilating/Probing

Function: To dilate, enlarge, probe, or explore

#### Bake dilator

Probe/Probe dilator  
Hanks dilator  
Hegar dilator  
Sim's uterine sound  
Bowman lacrimal probe

# SURGICAL TECHNOLOGY

## SOURCE LIST - SURGICAL INSTRUMENTS

### Accessory Equipment/Supplies

Function: To be used in conjunction with or in addition to basic or specialty equipment, instruments, or supplies.

Cherry dissectors

Screwdriver

Mallet

Groove director

Electrocautery handle (active electrode)

Electrocautery ground plate

Asepto syringe

Kitners

Cottonoids

### Suctioning/Aspirating Drains/Catheters

Function: To mechanically or manually remove fluid or irrigation fluid.

Foley

Malecot

Mushroom or Pezzer

T-tube

Penrose

Cholangiography catheter

Jackson-Pratt

Hemovac drain

Urethral catheter

Poole abdominal tip suction

Ferguson-Frazier tip

Yankauer tonsil tip

Trocar

Cannula

Aspirating tube

Autotransfusion double lumen tip