2010-2011

SURGICAL CLERKSHIP MACON

Bryan C. Weidner, MD, FACS

Mercer University School of Medicine

2010-2011

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CLERKSHIP CONTACTS

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TEXT BOOKS

REQUIRED READING

Blackbourne, L.H. *Surgical Recall* 5th Ed. 2009

Brunicardi F.C. *Schwartz's Principles of Surgery* 9th Ed. 2010

Lawrence, P.F. *Essentials of General Surgery* 4th Ed. 2006-

Silen, W. *Cope's Early Diagnosis of the Acute Abdomen.* 21st Ed. 2005

Townsend, C.C. Jr. et al. *Sabiston Textbook of Surgery* 18th Ed. 2008

Wapnick, S., et al. *Lange Q&A Surgery.* 5th Ed. 2007

Surgery Clerkship Notebook (provided at no charge unless you want the binder)

Surgical Case Scenarios Notebook (provided at no charge)

SURGERY CLERKSHIP GOALS

The Curriculum committee has mandated that the goals of the Surgical Clerkships in Macon and Savannah will be identical.

- To initiate an exposure to the disciplines of surgery.
- To teach the surgical clerks to obtain the cognitive knowledge and clinical competencies to recognize patients need for surgical consultation.
- To prepare a differential diagnosis derived from the clinical history and physical findings.
- To identify the necessary diagnostic tools to identify the diagnosis and be able to have a preliminary plan of management.
- To socialize medical students into the best of culture of medicine such that they develop an enduring commitment to compassionate care of patients and life-long learning

ATTENDANCE POLICY

1) Illness, Funeral, Births or family emergencies or Professional meetings may receive an absence – Clerkship Coordinator to be notified at 633-7101.

2) If the absence for illness is more than two days, a doctor's certificate will be required.

3) If an absence is more than one week, time will need to be made up to complete clerkship requirement.

4) For Extramural Meeting – some advance notice is required to avoid Night Call conflicts, etc.

CLERKSHIP RESPONSIBILITIES

1) Attend all orientation sessions.

2) Report to intern resident on each of the assigned surgical services.

3) Receive patient assignment, and OR assignments on each service.

4) To participate on night call as per prearranged schedule, attend <u>all</u> trauma codes and consults.

5) Log <u>all</u> patient encounters into New Innovations. Work hours and H&P's will be turned in every Monday to coordinator.

6) Attend <u>all</u> meetings required by Administration with <u>proper notification</u> to Clerkship Director.

7) Attend <u>all</u> didactic sessions unless you are scrubbed in the operating room or are participating in clinic or offices of Faculty Surgeons.

8) Be prompt in responding to beeper pages especially on night call and be responsive to follow directions from resident staff.

9) Report to Clerkship Director any breeches of professionals and/or harassment.

WORK RULES

1. Educational activities count as time in the hospital
2. Students will spend no more than 80 hours/week in the hospital as averaged over a four week period.
3. Weekend Call:
    - Friday > 6:00 p.m. to 8:00 a.m. Saturday
    - Saturday > 8:00 a.m. to 8:00 a.m. Sunday
    - Sunday > 8:00 a.m. to 8:00 a.m. Monday
4. Thirty hours is the maximum time limit for being in the hospital
5. Most Clerks will have one week night call each week.
6. Because of sequencing for one week, each clerk will have more than 80 hours. The aggregate will be less than the maximum 320 hours over a four-week period.
7. The first two days and the last four days of the clerkship there will be no call.
8. MUSM holidays will be observed and marked on your calendars. No Clerks will be on call.
9. Most educational activities take place in the early morning or late afternoon. On one or two occasions, there will be educational activities during the mid-day, and Clerks will be expected to participate.
10. Once the night call schedule is fixed, any changes must be given to the clerkship coordinator. The coordinator must have the capability to see where you are at any given time in case someone else may need you.

Patient Logs in New Innovations

You are responsible for logging your patient encounters into New Innovations on a weekly basis. Each Monday the clerkship coordinator will pull your patient encounters out of New Innovations for the Clerkship Director to review. The Clerkship Director will determine if you are getting adequate exposure to the disciplines of surgery. You will be graded at midpoint of the rotation and at the end of the rotation on the number of encounters, accuracy and if they were submitted in a timely manner. The total points for entering your patient logs will be 10 points; 5 at midterm and 5 at the end.

You are responsible to turn in one history and physical every Monday for the clerkship director to review. If your history and physicals are not adequate, the clerkship director will review them with you.

LIST OF DIDACTIC SESSIONS

ABC's of Trauma
Anesthesia
Bedside Procedures
Blunt Abdominal Trauma
Burns
Cardiac Surgery
Coagulation & Anticoagulation
Colorectal Disease
Common Post-op Complications
E.N.T. Surgery
Fluids & Electrolytes
GI Bleeding
Hernias
Liver & gallbladder
Medical Ethics
Medical Legal Issues
Neurosurgery
Orthopedic Surgery
Pancreas
Pediatric Surgery
Shock
Small Bowel
Stomach & Duodenum
Surgical Infections & Antibiotics
Surgical Nutrition
Surgical Oncology Melanoma
Suture Class
Thoracic Surgery
Thyroid & Parathyroid Disease
Urology
Vascular Surgery
Wound Healing

OSCE'S

Required in the 5th week as a measure of formative clinical skills:

- All encounters are observed on the day of OSCE's.
- All encounters will be scored live.
- There will be one written and one oral presentation.
- There will be group feedback provided to students.

SURGERY:

ROTATION 1: Monday, August 23, 2010
ROTATION 2: Monday, October 18, 2010
ROTATION 3: Monday, December 13, 2010
ROTATION 4: Monday, February 21, 2011
ROTATION 5: Monday, April 18, 2011
ROTATION 6: Monday, June 13, 2011

CLERKSHIP OBJECTIVES

The Surgical Clerkship is an eight-week program in two clinical campuses, Macon and Savannah. The two programs are quite separate, but are identical in content.

The objective of the clerkship is to provide a broad clinical exposure in a variety of clinical arenas to teach the clinical surgical clerks the principles of surgical disease, its recognition and plans of management. The clinical settings include classroom activities, outpatient clinical patient exposure, the operating room, the recovery room, the intensive care unit and the wards. It is expected that the surgical clerks will learn about the recognition of disease that a primary care physician would learn to recognize, so that the appropriate surgical consultation may be made.

The organization of the clerkship provides outpatient and inpatient exposure, intra-operative experience, post-operative care, and pre-operative diagnostic algorhythms surgical decision making.

The clinical clerks are expected to log their patient encounter into New Innovations. These will be printed by the coordinator on a weekly basis and reviewed by the director. The clerks will turn in a history and physicals and/or SOAP note to the coordinator every Monday to be reviewed by the Clerkship Director. The Director will give feedback if the history and physicals are not written adequately. The clerks are expected to be an integral part of the surgical team to which they have been assigned, they will report to the intern resident and follow them closely. A limited night call experience is expected 5 to 6 times in a two-month period.

The clerks must attend all post-graduate conferences and attend all didactic sessions that are provided for them. The didactic sessions are taught by attending surgeons and the resident staff from the Department of Surgery. There are also didactic, interactive discussions provided by surgical specialists in the areas of neurosurgery, orthopedics, and urology.

The clerks are expected to be professional, compassionate, and altruistic with an appropriate attitude, all of which are carefully observed.

Surgical Clerkship Objectives

Trauma

1) Understand the principles underlying the "A,B,C's" of trauma management to include:
   - Airway management
   - Circulation
   - Resuscitation
   - Initial management & treatment

2) Be oriented to the "Trauma Bay" to include:
   - Physiologic monitoring
   - Bedside procedures

Post-op Complications

3) Be familiar with and be able to manage "Common post operative complications" to include:
   - Post-op fever
   - Blood loss
   - Electrolyte imbalance
   - Airway complications

Shock

4) Be able to describe and classify common shock states to include:
   - Definition/classify, thermodynamics of perfusion pressure
   - Hypovolemic states
   - Inflammatory or septic shock
   - Neurogenic shock
   - Cardiogenic shock

   Also to include treatment or management plans for each of the above.

   Be able to describe:
   - Acidosis
   - Coagulopathic shock states
   - Describe the "bodies" ability to maintain homeostasis and "constant milieu" in shock like states

   Be able to define:
   - Preload
   - After load
   - Vascular resistance

Fluids & Electrolytes

5) Be able to physiologic changes in common electrolyte imbalance to include:
   - Composition of body fluids
   - Daily maintenance of fluid requirements
   - Control of essential body fluids

   Recognize signs of dehydration

   Manage:
   - Hyper & hypo Natremia
   - Hyper & hypo Calcemia
   - Hyper & hypo magnesium
   - Hyper & hypo phosphatemia

   Recognize and manage:
   - Acidosis, alkalosis, metabolic and respiratory

Wound Healing

- Define common types of wounds
- Outline the important phases of 1° wound healing
- Define healing by 2° intention

Abdominal Trauma

6) Recognize define an diagnose blunt abdominal and penetrating abdominal trauma to include:
   - Common physical findings
   - A FAST EXAM
   - A DPL

   Outline a plan of management penetrating and blunt force injury

Hernia

7) The student will recognize by history and physical diagnose the following hernias:
   - Direct
   - Indirect
   - Femoral
   - Richter's
   - Incisional
   - Sliding
   - Incarcerated
   - Shangulated
   - Reducable
   - Irreducible

   And be able to outline an operative plan for each

Stomach and Duodenum

8) Stomach and duodenum to include:
    - Upper GI bleeding
    - Gastric ulcer
    - Duodenal ulcer
    - Perforated ulcer

    Include indications for operative and conservative management

    Describe the role of H. Pylori in ulcer disease

    Discuss the management of Boerhaave Syndrome, Mallory-Weiss Syndrome and Pyloric Stenosis.

    Discuss the role of gastric cancer with a gastric ulcer.

Acute Abdomen

The student should recognize the signs and symptoms related to the diagnosis of the acute abdomen.

Small Bowel

9) Small Bowel to include recognition of:
    - SBO
    - Regional Ileitis/Crohn's Disease
    - TB of the small bowel
    - Lymphoma of the small bowel

    Describe the diagnosis and management for acute appendicitis

    Describe "An Ileus" and management there of.

    Define a Meckel's Diverticulum

    Define causes and management of small bowel fistula.

    Define and manage "carcinoid" of the small bowel.

Colon and Rectum

10) Recognize and diagnose
    - Ulcerative colitis

    Diagnose
    - Diverticulosis, diverticulitis
    - Complications of and management of complications

11) Colorectal cancer
    - Statistics of
    - Diagnosis and classify and stage
12) Relationship of polyps to cancer

Describe:

- Hemorrhoids
- Fissure in ano
- Fistula in ano

Describe Sigmoid Volumlus

Colorectal

Define:

- Colostomy
- Hartman's Procedure
- Abdominal perineal resection

Rectal Cancer

- Define
- Stage
- Management of
- Surgical management

Breast

Student will be able to:

- Define basic anatomy of the breast and axilla
- Define Coopers ligament

Diagnose common benign conditions

- Fibrocystic disease
- Cysts
- Fibroadenoma
- Intraductal papilloma
- Breast infections

Outline risk factors in and for malignancy

Classify tumors
Stage tumors

Outline treatment options.

Outline management of the axilla.

Define "Sentinal lymph" node biopsy and its use in the management of breast cancer.

Define Paget's disease and Phylloides tumors of the breast.

Melanoma

Student shall be able to:

- Describe the A,B,C, D's of melanoma
- Outline statistics of and describe microscopic features.
- Explain biopsy procedures.
- Explain importance of depth of tumor to the surgical margin required.
- Explain the role of the sentinal node in management of malignant melanoma.

Burns

Student will be able to:

- Know the rule of Nines
- Describe the Parkland formula
- Describe the rule of Nines in infants

Define:

- 1° burns
- 2° burns
- 3° burns

Discuss short term and long term complications of burns.

Outline signs and symptoms of "burn" to the lungs.

Define:

- Burn Eschar
- Biologic dressings in burns

Surgical Nutrition

Student shall be able to:

- Know basic caloric requirement
- Fluid requirements/ 24 hours
- Define TPN

Outline requirement of:

- Protein }
- Carbohydrates }Calories/kg
- Fats }

Define Respiratory quotient, R/Q

Outline special situations for Nutrition in:

- Renal failure
- Respiratory failure
- The diabetic surgical patient

Hemostasis/Blood Products

The Student will do as follows:

- Explain the "Simple Clotting Cascade"
- Describe Platelet functions
- List the major clotting components of fresh froze plasma
- List the physiologic properties of the red blood cell

The Student should be able to identify the following blood diseases with the appropriate lab studies:

- I.T.P.
- Platelet dysfunction
- Lymphoma
- Multiple Myeloma
- Leukemia

The Student must identify Coumadin function in the clotting cascade.

The Student must identify Heparin function in the clotting cascade.

The Student must identify what low molecular weight heparin acts in the clotting cascade.

E.N.T.

The Student shall:

- Identify the regions of the neck to include:
  - Triangles of the neck
  - Zones of the neck
  - Nerves running through the neck

Explain triple Endoscopy,

Explain the indications for a radical neck dissection.

List the indications for a tonsillectomy.

Surgical Infections

The Student shall:

- Identify Basic Antibiotic Coverage for infections:
  - Appendicitis
  - Ruptured/Diverticulitis
  - Fecal Soilage of peritoneum
  - Prophylactic antibiotics in large bowel disease
  - Bowel Prep
- Process for choosing an antibiotic for a wound infection from GI Surgery.
- Identify which antibiotic should be used for a ruptured viscus.
- Be able to recognize the use and misuse of antibiotics in the management of common surgical infections.

Medical Legal Issues

The Student shall identify:

- "Breach of a Standard of Care"
- Define Medical Negligence
- Define a Tort
- Explain the Basic steps on a legal action against a physician
- Define "discovery"
- List the steps to "avoid" medical malpractice litigation.

Orthopedics

The Student must be able to recognize common fractures and the basic principles of fracture management and management of orthopedic emergencies.

Thoracic Surgery

Define, diagnose, and discuss the common surgical conditions of the Thoracic Cavity including:

- Trauma
- COPD
- Pneumonias
- Tumors to include:
  - 1° squamous
  - Adenocarcinoma
  - Anaplastic Cancer
  - Oatcell Cancer
  - Carcinoid Cancer

Neurosurgery

The Student should understand the basic principles of the neurological examination as it relates to the diagnosis of Intra Cranial, Sub-dural, and Epidural hemorrhages, and the basic principles underlying the evaluation of blunt head trauma in terms of the Glasgow coma scale.

Liver, Gallbladder & Pancreas

Define:

- Hepatitis
- Cholecystitis
- Pancreatitis

Work up for the three disease processes above
Understand the consequences of a stone in the common duct
Diagnose acute cholangitis
Classify Pancreatitis
Manage acute pancreatisis
Work up a patient with a suspected pancreatic cancer
Define a Pseudocyst, acute and chronic

Genitourinary (GU)

The Student should be able to:

- Understand and define basic anatomy of the genitourinary system.
- Diagnose BPH
- Work up a suspected Prostatic cancer
- Define the role of a P.S.A.
- Understand the treatment options for Prostatic cancer
- Classify transitional cell cancer of the bladder
- Define a “hypernephroma”
- Manage a case of severe urinary tract infection

Thyroid & Parathyroid

- Classify Thyroiditis
- Define a thyroid goiter
- Diagnose:
  - Hyperthyroidism
  - Hypothyroidism
- Classify & stage thyroid cancer
- Define and classify 1°, 2°, 3° hyperparathyroidism
- Outline a work up for hypercalcemia
- Describe the anatomy of the parathyroid glands
- Outline indications for parathyroidectomy
- Describe the role of parathyroid hormone

Clinic Cognitive Objectives

Clerkship: Surgery Macon

Academic Period: 2010-2011

Director: Bryan C. Weidner, MD, FACS

Objectives:

- The student should understand the principles of the ABC's of trauma
- The student should recognize the signs and symptoms related to the acute abdomen.
- Recognize and treat electrolyte imbalance
- Be able to list the mechanisms of shock.
- Understand and recognize the components of physiologic monitoring.
- The student should be oriented to the trauma unit in the emergency room.
- The student should be able to list and manage the commonest surgical complications.
- The student shall define and understand the anatomy of the common hernias.
- Recognize the most common of surgical disorders of the small intestine and institute appropriate treatment.
- Be able to discuss the basic principles of diagnoses and the treatment of blunt and penetrating abdominal and chest trauma.
- Recognize, diagnose and then discuss the principles in the management of benign and malignant melanoma.
- Be able to recognize common fractures and the basic principles of fracture management.
- Define, diagnose, and discuss the principles of the management of burns.
- Diagnose and discuss the principles of management of common surgical conditions of the liver and gall bladder.
- Define, diagnose, and discuss the common surgical conditions of the thoracic cavity including:
    - * Trauma
    - * COPD
    - * Pneumonias
    - * Tumors
- Define, diagnose, and manage the surgical conditions of the breast including:
    - * Stones
    - * Tumors
    - * Trauma
    - * Infections
- Be able to recognize the use and misuse of antibiotics in the management of common surgical infections.
- Be able to discuss the recognition of the surgical diseases of the thyroid and the parathyroid.
- Be able to review the proper steps in the diagnosis and the management of masses in the neck, and the management of infectious airway conditions.
- Review the principles in the management of the upper G.I. tract, bleeding, & peptic ulcer disease.
- The student should understand the basic principles of the neurological examination as it relates to the diagnosis of intra cranial, sub-dural and epidural hemorrhages, and basic principles underlying the evaluation of blunt head trauma in terms of The Glasgow Coma scale.
- The student should understand the basic principles in the management of surgical nutrition.

Common Competency(s):

- The ability to do a surgical history & physical, make a reasonable diagnosis and outline a reasonable management plan of the surgical conditions.
- The student should gain the technical experience to be able to close a simple laceration, put in sutures, and be able to put in and remove staples.
- The student should be able to outline a plan of action for the management of surgical infections, with either surgery or a plan for antibiotics.
- The student should be able to evaluate the laboratory data and images to predict physical signs that result in reasonable, predictable diagnosis.
- The student should be able to evaluate a trauma victim as per the ATLS. manual and ABC's of trauma
- Students should be able to outline a reasonable plan of action meeting the general standards of care of blunt force trauma and to make a diagnosis.

Evaluation Method(s)

In the evaluation of the surgical objectives and the clinical competencies, these Competencies are evaluated in many different ways, and not all of the evaluative tools are utilized during the experience gained in getting a clinical competence.

What follows are the evaluative tools used by the Faculty to be sure that the student has reached these objectives.

a.) There will be direct observation of student performance of all the clinical competencies.
b.) Student case presentations and communicative skills shall be evaluated by the Faculty and the Resident Staff.
c.) The Resident and Faculty Staff will observe the clinical clerks while in the Operating Room.
d.) The clinical cognitive objectives are evaluated by the Shelf Test of the National Board of Medical Examiners in Surgery.
e.) The National Board of Medical Examiners Part II for cognitive knowledge book of multiple-choice questions.
f.) There are interactive group discussions with the Residents and Faculty with the medical students.
g.) The student's clinical skills are then evaluated by the Resident and Faculty staff, which then becomes part of the clinical skills evaluation.

Surgical Clerkship Evaluation

The evaluation of medical students rotating through the surgical clerkship is evaluated by a variety of instruments. The "Surgical" shelf test; the passing score is 57. Each student has a 20-minute oral exam given by three separate examiners. Each examiner asks the same questions to each student. At the end of the rotation each student chooses four evaluators to grade their clinical skills, knowledge, clinical reasoning and professionalism. The students' are also required to turn in six completed histories and physicals which are reviewed by the Clerkship Director and comments made when necessary. The students will log their patient encounters into New Innovations. These logs will be pulled every Monday for the Clerkship Director to review.

At the mid-point of the clerkship each student is required to go through a "standardized" patient exercise. Videos are used as an evaluation tool. Each student is scored by the patient and a faculty member. Students get immediate feedback as well as written comments.

The students are also evaluated on rounds with the residents and attending surgeons. When indicated comments about student performance are made to the clerkship director and may be passed on to the students when necessary.

The final evaluation is written by the Clerkship Director, based upon the evaluation tools. Each student receives a copy of the final evaluation. Each student has an opportunity to discuss the evaluation, if there is any disagreement with the comments. Copies of the final evaluations are kept in the students file.

Evaluation Tools

- Lecture, interactive discussion
- Patient encounters recorded
- Rounds on patients with resident and attending staff
- Standardized Patient encounter (OSCE)
- Departmental oral exam
- Faculty/Clinical evaluations
- Shelf test NBME subject test
- Compilation evaluation by Clerkship Director
    - Not every tool is used for every objective
    - Grading grid is used to compile score
    - Final clerkship evaluations will be reviewed by faculty and signed by the Department Chair.

Evaluation Methods for the Cognitive Objectives

S = Summative
F = Formative

ABC's of Trauma

- Interactive lecture discussions F
- Participation in trauma codes F
- Rounds on trauma patients F
- Recording patient encounters F
- Standardized patient evaluations F
- Oral Exam S
- Shelf Test S
- Faculty Evaluations S

Acute Abdomen

- Patient encounters recorded F
- Standardized patient evaluations F
- Lectures with interactive discussion F
- Oral Exam S
- Shelf Test S
- Faculty Evaluations S

Electrolyte Imbalance

- Case presentation-interactive discussions with lecture F
- Patient encounter evaluation F
- Patient management plan with standardized patients F
- Oral exam S
- Shelf Test S
- Faculty Evaluations S

Shock and its Mechanisms

- Interactive lecture discussion F
- Observation of standardized patient F
- Patient encounters in trauma bay F
- Evaluation of H&P encounters F
- Oral Exam S
- Shelf Test S
- Faculty Evaluations S

Physiologic Monitoring

- Interactive discussion with lecture F
- Patient encounter recording F
- Observation of standardized patient F
- Faculty evaluations S

Trauma Bay and ICU

- Tour with resident staff F
- Patient encounters F
- Observation of bedside procedures F
- Patient encounter evaluations F
- Oral exam S
- Shelf Test S
- Faculty evaluations S

Common Surgical Complications

- Interactive lecture discussions F
- Patient encounters F
- Standardized patient observations F
- Oral exam S
- Shelf test S
- Faculty evaluations S

Common Surgical Hernias

- Patient encounter recording F
- Interactive lecture discussion F
- Shelf test S
- Faculty evaluations S

Disorders of the Small Intestine and Appendix

- Interactive lecture discussion F
- Patient encounter recording F
- Standardized patient observation F
- Shelf test S
- Faculty evaluations S

Blunt Penetrating Trauma of the Abdomen and Chest

- Patient encounter recording F
- Interactive lecture discussion F
- Standardized patient observations F
- Oral Exam S
- Shelf Test S
- Faculty Evaluation S

Malignant Melanoma

- Interactive lecture discussion F
- Standardized patient observation F
- Recording of patient encounters F
- Shelf Test S
- Oral Exam S

The Recognition and Management of Common Traumatic Fractures with the Basic Principles of Management

- Standardized patient observation F
- Interactive lecture discussion F
- Patient encounter F
- Oral Exam S
- Shelf Test S
- Faculty Evaluations S

The Evaluation of Burns, Diagnosis and Management Plans

- Patient encounter evaluation F
- Interactive lecture discussion F
- Shelf Test S
- Oral Exam S
- Faculty Evaluation S

Discuss the Diagnosis and Principle of Management of Surgical Conditions of the Liver, Gall Bladder and Biliary Tree

- Interactive lecture discussions F
- Standardized patient encounters F
- Patient encounter evaluation F
- Oral exam S
- Shelf test S
- Faculty evaluations S

Define and Diagnose Common Surgical Conditions of Thoracic and Abdominal Cavity to include Trauma, COPD, Infections and Tumors

- Interactive lecture discussions F
- Standardized patient evaluations F
- Oral Exam S
- Shelf Test S
- Faculty Evaluations S

Define, Diagnose and Manage the Surgical Diseases of the Breast to include Benign and Malignant Tumors and Infections

- Patient encounters F
- Standardized patient evaluations F
- Interaction and evaluation F
- Oral Exam S
- Shelf Test S
- Faculty evaluations S

The Student should be able to make logical choice for the use of antibiotics in surgical infections

- Interactive lecture discussion F
- Patient encounters F
- Standardized patient evaluation F
- Shelf test S
- Oral exam S
- Faculty evaluations S

Student should be able to discuss. Diagnose and preliminary manage surgical conditions of the thyroid and parathyroid

- Interactive lecture discussion F
- Oral exam S
- Shelf test S
- Faculty evaluations S

The Student should be able to review, discuss and diagnose common ENT conditions to include tumors and infections but with emphasis on masses of unknown diagnosis in the neck.

- Interactive lecture discussion F
- Oral exam S
- Shelf test S
- Faculty evaluations S

Student should be able to review the principles in the Management of the GI Tract bleeding from the upper to the lower GI Tract.

- Interactive lecture discussions F
- Patient encounter evaluation F
- Oral exam S
- Shelf test S
- Faculty evaluation S

Student should understand basic concepts of the Neurologic exam as it relates to the diagnosis and management as it relates to Subdural, Epidural, and Subarachnoid Bleed. Evaluation of blunt head injury, interpret Glascow coma scare and Neurologic exam for tumors.

- Interactive lecture discussions F
- Patient encounters F
- Faculty evaluations S

The Student should understand and utilize the knowledge in patient care for the basic use of the principles of surgical nutrition.

- Interactive lecture discussion F
- Patient encounters F
- Shelf test S
- Faculty evaluations S

The Student will understand, comment on, describe and have a plan of management of the common Pediatric Surgical diagnosis.

- Interactive lecture discussion F
- Patient encounters F
- Shelf test S
- Faculty evaluations S

The Student will be able to present Colorectal Disease Principles of management and diagnosis of common colorectal disease found in the surgical patient.

- Interactive lecture discussions F
- Patient encounters F
- Oral exam S
- Shelf test S
- Faculty evaluations S

Genitourinary Surgical Disease Recognition

- Interactive lecture discussions F

Wound care and Wound healing, The Student should know how to suture and care for a wound and understand the process of wound healing.

- Suture demonstration with class F
- Shelf test S
- Faculty evaluations S

Surgery Clerkship Grading Grid

National Board Shelf Test 30 Points	**2-Digit Score** **57-70** **71-79** **80-89** **90 or above**	**Points** **10** **20** **25** **30**	Score of <57 will be Incomplete until retaken. If second try is <57 the clerkship is repeated.
Oral Exam(times 3) 24 Points		**3** **5** **8**	If an Oral Exam is failed, th grade is Incomplete until retaken & passed. 2nd failure requires repeat of clerkship
Patient Logs, H & P's and professionalism 20 Points	**H&P's** **Midterm patient logs** **Final patient logs** **Professionalism**	**5** **5** **5** **5**	If <10 total points, unsatisfactory and the student will require remediation.
Clinical Evaluations 26 Points		**15** **20** **26**	If <15 are unsatisfactory, student is re-evaluated for remediation.
***Points required to Pass=50**	***Each component must be individually passed.**	***Passing scores for each component included.**	

*Exam Policy requires all students to take the exams at the prescribed time and plan. **Failure** to attend *any exam* will result in an immediate incomplete and the exam must be taken at a time prescribed by Clerkship Director, Dr. Bryan Weidner.

Grading of the Surgical Clerkship

1. Shelf Test <57
2. Oral Exam <9
3. Clinical Skills <15
4. Patient Logs, etc. <10

For individual component failure to plan remediation:

1. Meet with the Clerkship Director
2. Shelf Test <57. Retake the Shelf Test.
3. Oral exam score <9. Retake oral exam with two examiners.
4. Clinical skills <15 will require a specific remediation plan based upon skills evaluation.
    a. Options include
        i. Timed period 1-3 weeks
        ii. Specific history & physical exams
5. Patient logs <10. Improperly recorded & documented despite attempts to correct deficiencies.
6. Any remediation component failed a second time will require the clerkship to be repeated.

Policy of Repeat Clerkship

Remediation on Case by Case basis depending on deficiencies may include the following:

- Repeat Oral Exams
- Further time on floor, OR, or clinic and/or attendance on trauma code
- Repeat shelf test

Faculty/Resident Evaluation Form

Student: _____ Date: _____
Clerkship: Surgical Rotation _____

Rating Scale: Please rate 1-5
5= Excellent, consistently exceed clerkship expectations
4= Above average, frequently exceeds clerkship expectations
3= Meets expectations most of the time
2= Fails to meet clerkship expectations, requires additional supervision
1= Did not observe

**Please make comments of student's on strengths and weaknesses

Clinical Performance:
Communication (Written/ Oral) _____
Case Presentation _____
Physical Examinations _____
Diagnosis & Patient Management Skills _____
Technical & Procedural Skills _____
Initiative _____
Relationship with Patients _____

Comments:
_____
_____

Knowledge and Clinical Reasoning:
Background Knowledge (Basic/ General) _____
Knowledge of Discipline _____
Problem Solving/Application of Knowledge _____

Comments:
_____
_____

Professional Behavior:
Work Ethic _____
Interpersonal Relationships _____
Reliability/Dependability/Responsibility _____

Comments:
_____
_____
Desirable Candidate for Residency: Please respond: YES___ NO___

Signature and Title of Evaluator:_____

Surgical Clerkship Oral Exam

The third goal of the clerkship is: To prepare a differential diagnosis derived from the clinical history and physical findings, to identify the necessary diagnostic tools to identify the correct diagnosis, and be able to institute a preliminary plan of management.

The purpose of the oral exam is to evaluate the student's ability to display competency of this goal.

Format of the exam:

- Each examiner presents (same clinical scenario to each student)
  - Scenarios will be provided to the examiner as a guide, but the exact scenario is at the discretion of the examiner.
  - The scenario must fall under the assigned topic to avoid overlap with the other examiners.
- Expectations of the exam
  - The history of present illness and a directed physical exam are the key components to be tested. The past medical history, past surgical history, medications, allergies, social history, family history, and review of systems all should be addressed in an abbreviated fashion and only the pertinent findings should be addressed.
  - At this point the student should generate a differential diagnosis.
  - The necessary diagnostic tools may then be ordered.
  - The student should then provide the final diagnosis.
  - A preliminary plan of management should then be described.
- Grading
  - **8 points**: no prompting required, displayed a thorough understanding of the disease process, generate a complete and an accurate differential diagnosis, and institute a concise and appropriate treatment plan
  - **5 points**: some prompting required, displayed an understanding of the disease process, generate a complete and an accurate differential diagnosis, and institute an appropriate treatment plan.
  - **3 Points**: significant prompting required, displayed only a basic understanding of the disease process, incomplete but accurate differential diagnosis and institutes a safe treatment plan.
  - **0 Points**: FAILURE, did not understand the disease process, cannot generate an appropriate differential diagnosis, and cannot describe a safe treatment plan.

Oral Examination Score Sheet

Student Name: _____

Date of Testing: _____

Examiner #1: _____ Topic: _____

Examiner #2: _____ Topic: _____

Examiner #3: _____ Topic: _____

Note to the Oral examining Physicians: Please check or underline the level that most nearly reflects the student's performance in each subject area and provide comments, please. Thank you.

#1. Oral Examiners comments, Subject one: **Honors/ High Pass/ Pass/ Unsatis**

#2. Oral Examiners comments, Subject two: **Honors/ High Pass/ Pass/ Unsatis**

#3. Oral Examiners comments, Subject three: **Honors/ High Pass/ Pass/ Unsatis**

Final Evaluation Form

Student Name:

Overall Assessment of Student's Performance

- National Board Shelf Test Score:
- Percentile Rank:
- Oral Exam:
- Case logs, H&P's, etc:
- Clerkship Point Score:
- (Maximum points are 50)

Pass / Fail:

Narrative Description of Student's Performance:

1. **Knowledge:**
2. **Clinical Skills:**
3. **Professionalism:**
4. **Patient Encounters / Service Hours:**

Professor and Chairman Department of Surgery
Don K. Nakayama, MD, MBA, FACS_____

Assoc. Professor, Department of Surgery
Bryan C. Weidner, MD, FACS _____

CLINIC COMPETENCIES

General Competencies:

- Patient Care
- Medical Knowledge
- Clinical Based Learning
- Life-long Learning
- Interpersonal and Communication Skills
- Professionalism

The identification of the general competencies for medical students as they graduate is a preliminary step in an effort designed to emphasize, outcome assessment of undergraduate medical education programs for the accreditation process.

The undergraduate medical program must require its students to develop competencies in the six areas as listed above and what is to be expected of a graduating medical student as they are awarded their degree. It is to be expected programs must define specific knowledge skills and attitudes on the basis of provided education experiences for their students to demonstrate the competencies.

Patient Care

Students must be able to provide and demonstrate patient care that is compassionate, appropriate, and effective for the treatment of disease and the promotion of health. Medical students are expected as follows:

- Communicate effectively; demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about the patients.
- Make reasonably informed decisions about the necessary diagnostic and therapeutic interventions based upon the patient information provided, up to date scientific knowledge and evidence and clinical judgment.
- Be able to develop and outline patient management plan.
- Outline a plan for counseling and educating patients and their families.
- Use information technology to support and develop the patient care decisions and patient education.
- To perform under Supervision when training and experience allows the medical and technical procedures for the care of that patient.
- Provide an outline of healthcare services aimed at preventing and or maintaining health.
- To be able to outline and work with other healthcare professionals and outline a patient focus care plan.

Medical Knowledge

Medical students upon graduation must be able to demonstrate knowledge about the established and evolving biomedical, clinical, cognitive meal sciences and be able to apply these to patient care.

- Demonstrate investigatory analytical thinking approach to clinical problems.
- Be able to apply the basic and clinically supportive sciences which are appropriate for the discipline.

Practice Based Learning and Improvement

Students must be able to evaluate patient care practices and evaluate scientific evidence from current literature to improve the accuracy of their diagnoses.

- Be able to develop algorithms from common clinical problems.
- Be able to search resources to assimilate evidence for the management of their patients with clinical problems.
- Utilize information technology to obtain current medical information, be able to access on-line medical information to support their life-long learning.
- Be able to facilitate the learning of other students.

Interpersonal and Communication Skills

Medical students upon graduation must be able to demonstrate interpersonal and communication skills that result in effective information exchange, teaming with their parents, families, and professional associates. Medical students should as follows:

- Be able to create and plan a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and be able to illicit and provide information using effective not verbal, explanatory questioning, and writing skills.
- Work effectively with others as a member of the healthcare team and other professional group and healthcare providers.

Professionalism

Medical students must demonstrate a commitment to carrying out professional responsibilities and adherence to ethical principles and sensitivity to a diverse patient population. Medical students are expected to as follows:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients that supersedes self interest accountability to patients, society, and the profession; and a commitment to excellence and ongoing professional development and lifelong learning.
- Demonstrate a commitment to ethical principles pertaining to provision clinical care confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patient's culture, age, disabilities, and national origin.

Medical Student Competencies

The student graduating with a Doctor of Medicine degree from Mercer University School of Medicine will be prepared for entry into the profession of medicine. Demonstration of the following competencies will provide evidence of readiness to enter residency training.

Patient Care

Students must be able to participate in the provision of family-centered patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Students are expected to:

1. Demonstrate caring and respectful behaviors when interacting with patients and their families
2. Demonstrate consideration of patients' privacy, dignity, and psychological needs
3. Obtain an appropriate medical history accurately and efficiently
4. Perform an appropriate physical examination accurately, efficiently and respectfully
5. Identify the extent of evaluation needed, appropriate to the patient presentation
6. Perform bedside clinical and laboratory diagnostic procedures from a core skills list defined
7. Interpret results of common laboratory studies
8. Use information technology to supports patient care decisions and patient education
9. Recognize personal limitations and biases and see consultation/help when appropriate
10. Develop patient management plans for common medical problems
11. Recognize the importance of relieving pain and suffering in patients and demonstrate knowledge of appropriate meant to relieve pain and suffering
12. Recognize life-threatening emergencies and know appropriate initial intervention
13. Demonstrate effective patient education/counseling skills
14. Provide health care services aimed at disease prevention and health promotion
15. Collaborate w/ health care professionals (including other disciplines) to provide patient focused care

Topics in Surgery	abdominal trauma	acute abdomen	blood	breast	bowel (small)	burns	colon	ear,nose and throat	ethics	fluids and electrolytes	gallbladder	genitourinary	hernia	infection	legal	liver	lung	melanoma	neurosurgery	nutrition	orientation	orthopedics	pancreas	parathyroid	pediatrics	physiologic monitoring	post-op complication	rectum	shock	stomach	thyroid	trauma	wounds
I.1																					x												
I.2																					x												
I.3	x	x	x	x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x
I.4	x	x	x	x	x	x	x	x			x	x	x	x		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x
I.5	x	x	x	x	x	x	x	x		x	x	x	x	x		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x
I.6	x			x		x	x	x				x		x		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x
I.7	x	x	x	x	x	x	x	x		x	x	x		x		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x
I.8	x	x	x	x	x	x	x	x		x		x		x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x
I.9																																	
I.10	x	x	x	x	x	x	x	x		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
I.11	x	x	x	x	x	x	x	x		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
I.12	x	x	x	x	x	x	x	x		x	x	x		x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
I.13	x	x	x	x	x	x	x	x			x	x	x					x		x	x		x										
I.14																																	

Chart I: "X" indicates Competencies related to Patient Care covered within the Didactic Topics taught in the Clerkship in Surgery

Medical Knowledge

Students must demonstrate knowledge about established and evolving biomedical, clinical and cognate (epidemiological and social-behavioral) sciences and the application of this knowledge to patient care.

Students are expected to"

1. Demonstrate an investigatory and analytic thinking method that approaches clinical problems in a logical, efficient, and evidence-based manner.
2. Know the normal structure and function (pathology and pathophysiology) of the body and its major organ systems as observed in various diseases and conditions
3. Know the mechanisms important in maintaining homeostasis
4. Know the various causes (e.g. genetic, developmental, microbiologic, autoimmune, Neoplastic, degenerative, traumatic, behavioral) of illnesses and the way in which they affect the body (pathogenesis)
5. Know the altered structure and function (pathology and pathophysiology) of the body and its major organ systems as observed in various diseases and conditions.
6. Utilize the scientific method in diagnosing diseases or conditions and in determining the efficiency of traditional and nontraditional therapies
7. Know the bio-psychosocial determinants of health and illness
8. Know the epidemiology of common diseases within a defined population, and the approaches useful in reducing the incidence and prevalence of those diseases.
9. Know the principles of pharmacology, therapeutics, and therapeutic decision making.
10. Know the principles of bioethics
11. Know the natural history, clinical presentation, diagnostic findings, treatment, management strategies and prognosis for common medical problems
12. Know the scientific principles underlying laboratory tests, radiological and other investigative studies
13. Know the principles of health promotion and disease prevention.

Topics in Surgery	abdominal trauma	acute abdomen	blood	breast	bowel (small)	burns	colon	ear,nose and throat	ethics	fluids and electrolytes	gallbladder	genitourinary	hernia	infection	legal	liver	lung	melanoma	neurosurgery	nutrition	orientation	orthopedics	pancreas	parathyroid	pediatrics	physiologic monitoring	post-op complication	rectum	shock	stomach	thyroid	trauma	wounds
II.1	X	X	X	X	X	X	X	X		X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
II.2	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
II.3	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
II.4	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
II.5	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
II.6	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
II.7																																	
II.8				X	X	X	X	X					X	X	X		X								X			X		X			
II.9	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
II.10	X	X	X	X	X	X	X		X		X	X		X	X	X	X	X	X		X		X	X	X			X					
II.11	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
II.12	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
II.13																																	

Chart II: "X" indicates competencies related to Medical Knowledge covered within Didactic topics taught in the Clerkship of Surgery.

III. Practice-Based Learning and Improvement

Students must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. These objectives relate to the areas of lifelong learning, self-directed learning, critical thinking, evidence-based practice, quality improvement and informatics.

Students are expected to:

1. Analyze clinical experiences and systematically improve care
2. Understand and apply the concept that problems are opportunities for change and for the advancement of knowledge
3. Locate appraise, assimilate, and apply evidence from scientific studies related to patients' health problems
4. Demonstrate knowledge of study designs and statistical methods and the application of this knowledge to the appraisal of clinical studies
5. Use information technology to manage information, access on-line medical information, and support their own educational endeavors
6. Demonstrate a commitment to the teaching and learning of students and other health care professionals.
7. Utilize clinical and scientific information in the continuous process of determining priorities and care decisions for patients
8. Demonstrate consistently the skills of self-directed learning and progressive professional development

Topics in Surgery	abdominal trauma	acute abdomen	blood	breast	bowel (small)	burns	colon	ear,nose and throat	ethics	fluids and electrolytes	gallbladder	genitourinary	hernia	infection	legal	liver	lung	melanoma	neurosurgery	nutrition	orientation	orthopedics	pancreas	parathyroid	pediatrics	physiologic monitoring	post-op complicatio-	rectum	shock	stomach	thyroid	trauma	wounds
III.1													X										X										
III.2																																	
III.3	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
III.4																																	
III.5	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
III.6																					X												
III.7	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
III.8																																	

Chart III: "X" indicates competencies related to Practice-based learning and improvement covered within the Didactic Topics taught in the Clerkship in Surgery.

IV. Interpersonal and Communication Skills

Student must be able to demonstrate interpersonal and communication skills with patients, their patients' families, and professional associates.

Students are expected to:

1. Create and sustain therapeutic and ethical relationships with patients based on mutual respect and trust
2. Demonstrate (or use) effective listening skills
3. Provide information using effective nonverbal, oral and writing skills with patients, families, colleagues and other members of the health care team.
4. Work effectively with others as a member or leader of a health care team or other professional group
5. Incorporate patient preference and patient autonomy into patient care plans
6. Teach and present effectively.

Topics in Surgery	abdominal trauma	acute abdomen	blood	breast	bowel (small)	burns	colon	ear-nose and throat	ethics	fluids and electrolytes	gallbladder	geniourinary	hernia	infection	legal	liver	lung	melanoma	neurosurgery	nutrition	orientation	orthopedics	pancreas	parathyroid	pediatrics	physiologic monitoring	post-op complication	rectum	shock	stomach	thyroid	trauma	wounds
IV.1				X	X	X			X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IV.2	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IV.3			X	X	X		X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IV.4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IV.5	X	X	X	X	X		X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IV.6																																	

Chart IV: "X" indicates competencies related to Interpersonal and Communication skills covered within the Didactic Topics in the Clerkship in Surgery

V. Professionalism

Students must demonstrate professional behavior, adherence to ethical principles, and sensitivity to a diverse patient population.

Students are expected to:

1. Demonstrate respect, compassion, integrity and altruism when responding to the needs of patients and society
2. Demonstrate accountability to patients, society, and the profession
3. Demonstrate a commitment to excellence and on-going professional development
4. Demonstrate personal integrity, reliability, honesty, and self-discipline
5. Demonstrate the capacity to take responsibility for their own actions, including errors recognition and acceptance of limitations of one's knowledge and clinical skills, and recognition of the need for supervision and self-assessment
6. Project a professional image in manner, dress, grooming, and interpersonal relationships consistent with the medical profession's contemporary standards in the community
7. Demonstrate respectful, appropriate social interaction and interpersonal behaviors with peers, faculty, patients, and all members of society at all times.
8. Be a good citizen of the community and society
9. Demonstrate comportment consistent with the role of physicians in society, including those behaviors required to obtain and maintain medical licensure
10. Mentor others in professional behavior (serve as a role model and teacher)
11. Recognize personal limitations that may affect patient care and professional behavior, including but not limited to medical conditions and substance abuse
12. Demonstrate a commitment to ethical principles related to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
13. Recognize ethical dilemmas and identify sources of appropriate consultation (e.g. hospital ethics committee)
14. Describe the threat to medical professionalism posed by the conflicts of interest inherent in various financial and organizational arrangement for the practice of medicine
15. Accept that the patient is a person with important values, goals, and concerns, who lives in a family/community context; and that these factors have a significant effect on the disease process and treatment
16. Demonstrate tolerance and consideration for the concerns and opinions of others
17. Recognize the effect characteristics such as culture, age, gender, and disability have on patient care, preferences/perceptions and outcomes.

Topics in Surgery	abdominal trauma	acute abdomen	blood	breast	bowel (small)	burns	colon	ear, nose and throat	ethics	fluids and electrolytes	gallbladder	genitourinary	hernia	infection	legal	liver	lung	melanoma	neurosurgery	nutrition	orientation	orthopedics	pancreas	parathyroid	pediatrics	physiologic monitoring	post-op complication	rectum	shock	stomach	thyroid	trauma	wounds
V.1	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.2	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.3																																	
V.4	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.5	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.6	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.7	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.8																																	
V.9																																	
V.10																																	
V.11																																	
V.12	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.13	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.14																																	
V.15	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.16	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
V.17	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o

Chart V: "O" indicates competencies covered during the Surgical Clerkship Orientation.

VI. Systems-Based Practice

Students just demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is optimal value.

Students are expected to:

1. Operate effectively within health care delivery systems by understanding such issues as financing, quality of care, access and information management systems
2. Demonstrate an understanding of how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
3. Differentiate among types of medical practice and delivery systems, including methods of controlling health care costs and allocating resources
4. Identify cost-effective health care and resource allocation that do not compromise quality of care
5. Advocate for quality patient care
6. Provide assistance to patients as they navigate through available community resources including physician, other medical and non-medical community resources
7. Demonstrate the ability to help the patient and family navigate through end-of-life issues such as appropriate use of palliative care, hospice, durable power of attorney for health care, and living will.
8. Identify community health care needs, identify community resources, and develop community-based strategies that decrease risks for disease or injury and promote wellness.
9. Work in interdisciplinary teams with other medical and non-medical service providers.
10. Analyze health care outcomes and barriers to intended outcomes in the context of health care delivery systems.
11. Demonstrate understanding of physicians' responsibilities in reporting events such as notifiable diseases, deaths, births, child abuse, and adverse drug reactions.

Topics in Surgery	abdominal trauma	acute abdomen	blood	breast	bowel (small)	burns	colon	ear,nose and throat	ethics	fluids and electrolytes	gallbladder	genitourinary	hernia	infection	legal	liver	lung	melanoma	neurosurgery	nutrition	orientation	orthopedics	pancreas	parathyroid	pediatrics	physiologic monitoring	post-op complication	rectum	shock	stomach	thyroid	trauma	wounds
II.1																																	
II.2																																	
II.3																																	
II.4																																	
II.5																																	
II.6																																	
II.7																																	
II.8																																	
II.9																																	
II.10																																	
II.11																																	

Chart VI: "X" indicates competencies related to Systems-based Practice covered within the Didactic Topics taught in the Clerkship in Surgery