

**DEPARTMENT OF SURGERY  
DEPARTMENT OF ORTHOPAEDIC SURGERY  
DEPARTMENT OF OROLARYNGOLOGY**

**FACULTY HANDBOOK**

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## CLERKSHIP OBJECTIVES

After completing the third year surgery clerkship, the medical student will develop an understanding of the care of surgical patients. This understanding will include the following goals:

### **Professionalism and Attitudes**

- Active participation as a member within a surgical team; participation will include maintaining professional relationships among team members while delivering patient centered care.

### **Knowledge-Base**

- As a member of the surgical team, the student will perform a pre-operative assessment and preparation of the surgical patient in both elective and emergent circumstances.
- As a member of the surgical team, the student will describe the physiology of operative interventions, including anesthetic effects, post-operative recovery, influence of complications, and convalescence.
- The student will be exposed to multiple aspects of the profession of surgery, including the surgical specialties and anesthesiology.
- The student will demonstrate general medical knowledge necessary to understand the pathophysiology, presentation, and management of the common surgical diseases.

### **Clinical Skills**

- The student will be instructed in the performance of basic surgical skills, including sterile technique, wound care, and resuscitation.

To meet these goals of the surgery clerkship, the following objectives will be assessed for each student:

### **Professionalism and Attitudes**

- The participation of each student on a general surgery team for four weeks; assessment of performance will be based upon the student's ability in data collection (history, examination, objective data), participation in daily work rounds, presentation of patient information and cases, professionalism, and collaborative efforts with team members.

### **Health Maintenance and Preventive Care**

- The student will be assigned 2 surgical cases (two during unassigned specialty weeks) during the clerkship; the student will evaluate the patient (history and examination), participate in the operating room, engage in post-operative care of the patient, and provide a detailed written discussion of the patient (to include history, physical examination, treatment options and rationales, and pathophysiology).
- Students observe the discussion of cancer screenings with patients.

## **CLERKSHIP OBJECTIVES (cont.)**

### **Clinical Skills**

- The student will be instructed in basic surgical skills and techniques via laboratories (suture lab, IV lab, casting exposure) and direct patient care; under appropriate supervision, students will participate in sterile technique, wound care, and the insertion of IVs, NG tubes, and catheters.
- The student will be instructed in Laparoscopic procedures and principles.
- The student will participate in the accurate and complete documentation of patient care to include the preparation of operative notes, post operative orders, and progress notes.

### **Knowledge-Base**

- Students will be exposed to the breadth of the surgical specialties (including general surgery, minimally invasive surgery, surgical oncology, vascular and cardiothoracic surgery, otolaryngology, plastic surgery, orthopedic surgery, burn and trauma surgery, pediatric surgery, neurological surgery, and urologic surgery) through patient cases, clinic assignments, lectures, readings, case presentations and a two week team assignment with a surgical subspecialty.
- The patient encounter experience will provide exposure to the common surgical malignancies, patients with acute abdominal pain of surgical etiology or treatment, surgical vascular diseases, and surgical trauma or critical care. Students will maintain a log of patient encounters.
- The student will be assigned 2 surgical cases (one assigned case the 2 weeks student not on assigned specialty weeks) during the clerkship; the student will evaluate the patient (history and examination), participate in the operating room, engage in post-operative care of the patient, and provide a detailed written discussion of the patient (to include history, physical examination, treatment options and rationales, and pathophysiology).
- Assimilation of the knowledge of the care of the surgical patient and the surgical diseases will be assessed by the NMBE Shelf examination at the end of the rotation.

# **SURGERY CLERKSHIP INFORMATION FOR NEW FACULTY**

## **ROTATION ASSIGNMENTS**

There are 16-17 students on every 8 week block. Each student will rotate with General Surgery for 4 weeks and with a specialty service for 2 weeks. A lottery will be used for their 4 weeks of general surgery (University, VA, or Surgical Oncology), and 2 weeks of specialty (Anesthesia, Burn Unit, Cardiothoracic Surgery, ENT, Neurosurgery, Orthopedic Surgery, Pediatric Surgery, Plastic Surgery, Trauma, Urology or Vascular Surgery). The other 2 weeks will be assigned based on educational needs and preference. The student will round with the team, write workups and progress notes, scrub on OR cases, and attend clinics. Ward performance will be evaluated by the surgical attendings and residents.

Each student is responsible for a detailed workup of 2 specialty patients from non-specialty weeks. Cases will be assigned by the Clinical Program Coordinator or faculty to provide a wide ranging surgical experience for every student. The student participates in the patient's anesthetic induction, operation, postoperative note and order writing, and follows each patient throughout the hospital stay. The attending surgeon evaluates the student's OR performance, and grades the workup.

The workup (history and physical) includes all components taught in the M1 and M2 years. It should be complete, concise and legibly handwritten or typed (single spaced and not less than 10 font). Maximum length of the assigned workups is 4 pages (single-sided), with 1 page (side) dedicated to pathophysiology. When a new patient is assigned, the workup is completed promptly and delivered to the office of the Clinical Program Coordinator within 2 days. Penalties will be assessed for late work-ups.

## **DISCUSSION SESSIONS**

Faculty discussion sessions with students are held daily at pre-scheduled times in N501 or MC401. The student's active participation is expected. If a student is scrubbed when it is time for a session to begin, the operating room surgeon will determine if the student should leave. This decision is made based on the benefit of staying with the case versus attending lecture.

Dr. Eubanks, Chairman of Surgery, meets with the students at the beginning of the block to introduce them to the Surgery Clerkship and again at the end of the block to obtain student feedback of their clerkship experience. Dr. Mark Wakefield, Course Director, meets with the students during orientation to instruct them on using the on-line PLOG system to document their patient experiences in order to meet pre-determined skill requirements.

## CASE PRESENTATIONS/CHAPTER REVIEW

Students will be assigned to teams of 2/3 students to do a case presentation each week (weeks 2-7) per block. The case presentations will be mentored by a faculty/fellow/resident. This will be a pass/fail activity. Your creativity and an interactive atmosphere are encouraged.

The required textbooks are Essentials of General Surgery, 4<sup>th</sup> edition and Essentials of Surgical Specialties, 4<sup>th</sup> edition, both by Lawrence, et al. An optional companion textbook is Surgery: A Competency-based Companion by Barry Mann.

Case presentations should include:

1. Objectives
2. Clinical presentation
3. Pathophysiology
4. Medical/Surgical Management

Topics will include:

1. Open Reduction Internal Fixation Extremity
2. Cancer
3. Cardiovascular
4. Minimally Invasive Surgery-cholecystectomy/hernia
5. Bowel Resection
6. Craniotomy
7. Vascular Access
8. Breast
9. Traumatic Abdomen
10. Head & Neck anatomy
11. Anesthesia-techniques/complications
12. Raised intracranial pressure-principals and management
13. Wound healing/reconstructive surgery
14. Acute burn-resuscitation and management
15. Chapter Review/NBME Review

## FACULTY EVALUATION OF STUDENTS

Each student's performance is continuously evaluated during the block. The final grade is determined by a combination of:

|    |  |              |
|----|--|--------------|
| 1) | General Surgery ward performance             | 30.0%        |
| 2) | Specialty Week (x2) performance              | 12.5%        |
|    |  | 12.5%        |
| 3) | Operating room performance/Patient write-ups | 10.0%        |
| 4) | On-call performance                          | 10.0%        |
| 5) | NBME Surgery Shelf Exam                      | <u>25.0%</u> |
|    |  | 100.0%       |

In addition, each student is required to complete an on-line skills assessment (PLOG) during the clerkship. This documents the student's satisfactory performance of basic surgical skills such as Foley catheter placement and must be completed by the end of the clerkship.

Each student is also required to complete on-line evaluations of the faculty (OR, clinic, service and lectures) and residents (call and service) that they work with during the 8-week rotation, as well as an overall evaluation of the 8 weeks of the clerkship.

**The Department of Surgery adheres to all policies found in the University of Missouri Health Care Medical Student handbook, <http://som.missouri.edu/>.**

## **FACULTY EVALUATION OF STUDENTS (Cont.)**

The Faculty Grading Session is held approximately 4-6 weeks after the end of the Clerkship (once NBME scores are available). At that time all student grades are discussed and final grades are assigned. Assignment of grades are based on the following criteria:

### **Honors**

A student will be eligible for the Honors designation if the student:

- 1) Scores at or above the 90th percentile on the NBME examination
- 2) Faculty and resident evaluations are consistently excellent
  - 8 and 9s predominate
  - Mean score greater than 8
- 3) Improvement through rotation with excellent evaluations, performance, and professionalism

### **Letter of Commendation**

A student will be eligible for the Letter of Commendation designation if the student:

- 1) Scores at or above the 80th percentile on the NBME
- 2) Faculty and resident evaluations are consistently above average
  - 7, 8 and 9s predominate
  - Mean score greater than 7.5
- 3) Improvement through rotation with superior evaluations, performance, and professionalism.

### **Satisfactory**

A student will be determined to have performed at a Satisfactory level if the student:

- 1) Scores at or above the 10th percentile on the NBME
- 2) Faculty and resident evaluations are average or above
  - Mean score greater than 4.0
- 3) Improvement through rotation with average evaluations, performance, and no deficits in professionalism
- 4) Satisfactory completion of PLOG data entry

Evaluator's comments can be very important in determining final grades. Therefore, each faculty evaluator is encouraged to provide as many substantive comments as possible.

### **House Officer Score**

The House Officer Score is also assigned at grading session and is based on evaluations received during the Clerkship. This represents the faculty/resident assessment of the student's potential as a resident. On a 1-5 scale, a score of 1 represents a highly desirable student and a score of 3 represents an average recruit.