Surgical Clerkship Goals and Objectives

By the end of the surgical clerkship, students are expected to be able to:

- Perform complete, accurate histories and physical examinations on adult surgical patients and focused histories and exams when appropriate
- Recognize pertinent positive and negative history and exam findings
- Interpret laboratory, diagnostic, and radiological tests associated with common surgical diseases
- Formulate from the history, physical exam, and patient studies a differential diagnosis and develop an initial plan for further patient evaluation and treatment
- Have a basic knowledge of common surgical diseases and patient presentations through patient interactions, tutorials, and conferences
- Develop skills in routine technical procedures necessary for taking care of adult surgical patients
- Develop skills in problem solving through the experience of attending rounds, office hours, and time spent in the operating room
- Demonstrate medical communication skills by performing satisfactory oral presentations and patient case write-ups
- Demonstrate interpersonal skills necessary to maintain professionalism
- Actively participate as a member of the health care team

Department of Surgery weekly educational activities

All students rotating on the surgical services are expected to attend the below regularly scheduled educational departmental activities on a mandatory or elective basis depending on their specialty rotation

a. **Department of Surgery Grand Round:** 1st Monday of every month at 7:30am-Professor Ismail Khalil Auditorium

2. **General Surgery Grand Round**
    a. Every Tuesday at 7:30am-Professor Ismail Khalil Auditorium
3. **Case discussion series with Dr. Walid Faraj or Dr. Mohamad Khalife**
    a. Every Wednesday at 4:00 pm-Surgical Library
4. **Case discussion series with Dr. Faek Jamali**
    a. Every Thursday at 2:00 pm-Surgical Library
5. **Evidence-based medicine (EBM) session with Dr. Eman Sbaity**
    a. Every Tuesday at 4:00 pm - Surgical Library
6. **Pediatric Lecture series with Dr. Samir Akel or Dr. Maher Soubra**
    a. Every Thursday at 4:00pm-Surgical Library
7. **Chairman's Conference series with Dr. Jamal Hoballah**
    a. Every Friday at 4:00pm-Surgical Library

8. **Orthopedic Surgery Conference**
    a. Students rotating in the Orthopedic surgery division
    b. Every Thursday at 8:00am-3rd Floor, Afeiche Orthopedic Library

9. **Vascular Surgery Conference**
    a. Students rotating in the General and Cardiovascular teams
    b. Every Tuesday at 8:45am-Surgical Library

10. **Vascular Surgery Case Discussion**
    a. Students rotating in the General and Cardiovascular teams
    b. Every Tuesday at 12:30pm-Surgical Library

11. **Evidence-based medicine (EBM) session with Dr. Eman Sbaity**
    a. All students in the general surgery teams
    b. Every Tuesday at 4:00 pm - Surgical Library

12. **General Surgery Journal Club**
    a. Students rotating in the General surgery teams- *optional*
    b. Last Tuesday of every month at 5:30pm-Surgical Library

13. **Skills Lab Training session**
    a. All students rotating in the General surgery – Team B
    b. Every Tuesday at 2:00pm-Surgical Library

Attending Teaching Round:

Each week, the attending on-call conducts 2 teaching rounds during which students will be supervised and assessed in performing history taking, physical examination and communication skills. The assessment and evaluation performed by the attending will be discussed with the student for immediate feedback.

During the rotation, the chief and senior surgical residents will also be assessing all students in history taking, physical examination, communication skills, applying principles of management, and understanding mechanisms of disease with feedback.

Work load

General surgical ward rounds: Each student is assigned to 1 or more patients and participates in the ward rounds.

Specialty ward and OPD patients: Each student is assigned to 1 or 2 cases depending on the number of clinic patients.

Students' responsibilities:

1. Students are expected to obtain a detailed history, perform a thorough physical examination, establish an adequate differential diagnosis, and plan a diagnostic and therapeutic strategy for each case. Faculty members will conduct case-discussions in a Problem-Based Learning approach.
2. Students are expected to present their cases in an organized manner starting with the chief complaint and present illness and including the pertinent physical findings, differential diagnosis and the diagnostic and therapeutic strategies.
3. Students are expected to log all cases and learning experiences in which they have engaged in clinical care, and/or interactive discussions that involve participation in history, physical examination, diagnosis or treatment.
4. Students are expected to show high standards of morality, professionalism, responsibility, ethicality, punctuality, and respect for their patients, families, colleagues, hospital staff, and teachers.

The surgical clerkship focus will be primarily on Problem Solving and Decision Making Skills. However, a three-month experience in surgery cannot result in a comprehensive understanding of surgical disease and surgical intervention. Therefore, the students can only be expected to become acquainted with the most common disease states, which either result in surgery or are a consequence of surgical intervention.

Textbook:

General Topics above are linked directly to the e-book, ***Current Surgical Diagnosis and Treatment*** by **Lawrence W. Way.**

Surgery: A Case Based Clinical Review By De Virgilio, Christian, Paul N. Frank, and Areg Grigorian, eds. Springer, 2015.

EXAMS

Rotation-end Examination

a. OSCE Examination

As of the 2013-14 academic year, the Department of Surgery has been administering an Objective Structured Clinical Examination (OSCE). The Surgery OSCE has been structured to comprise a circuit of 10-12 stations of 4 minutes each. Each student rotates through the stations and is examined on a one-to-one basis with 1 or 2 examiners. In this way, all students would be asked the same questions which would allow fairer peer comparison. The stations covered cases in general surgery, vascular surgery, pediatric surgery, and suturing skills.

a. Med III year-end Examination

A standardized surgical examination is administered at the end of the Med III year, the National Board of Medical Examiners (NBME) Surgery Subject Test or "shelf" exam. During the 2-hour and 40 minutes

exam that consists of 100-110 questions, students should demonstrate adequate knowledge of the surgical diseases and the materials covered during the surgical rotation.

Areas of principal emphasis on the NBME exam include the following physician tasks:

(1) Establishing a diagnosis
(2) Applying principles of management
(3) Understanding mechanisms of disease.

There is no concern for students learning actual surgical techniques, an area of knowledge that is for residents. Although major emphasis on the exam will be placed upon nutritional and digestive disorders, other organ systems and subspecialty surgery will make up an additional two-thirds of the exam. Many of the questions appear in clinical vignette form.

MANDATORY ROTATIONS:

General Surgery Rotation:

During the general surgery rotation in Team A, Team B and Team C, and Cardiovascular team students will typically encounter the following conditions:

- Perioperative care
- Fluids, electrolytes, nutrition
- Post op complication
- Abdominal pain
- Breast
- GI bleeds
- Hernias
- Jaundice
- Trauma/shock
- Dysphagia and GERD
- Obesity and the surgical patient
- Organ Transplantation
- Perianal problems and colon cancer
- Thyroid and parathyroid
- Vomiting/diarrhea/constipation

ELECTIVES:

a. Orthopedic Surgery Rotation:

By the end of this rotation, students are expected to

- Take an accurate and directed history as well as perform appropriate physical examination.
- Evaluate orthopedic patients at time of admission, and they should be monitored by the residents who will provide immediate feedback and instruction on the development of an appropriate physician/ patient interpersonal and professional relationship, history taking and appropriate physical exam as well as interpretation of appropriate radiographic studies.

During this rotation, students will likely encounter the following orthopedic conditions:

- Knee: Meniscal tears, osteoarthritis, knee effusion, ligamentous instability of the knee, anterior knee pain
- Shoulder: impingement, partial and full thickness rotator cuff tears, shoulder instability, biceps tendonitis, frozen shoulder.
- Tennis elbow / lateral epicondylitis.
- Foot and ankle sprain, ankle fracture, plantar fasciitis.

b. Urology Surgery Rotation:

By the end of this rotation, students are expected to:

- Take an accurate and directed history as well as perform appropriate physical examination.
- Evaluate urologic patients at time of admission, and they should be monitored by the residents who will provide immediate feedback and instruction on the development of an appropriate physician / patient interpersonal and professional relationship, history taking and appropriate physical exam as well as interpretation of appropriate radiographic studies.

This rotation emphasizes the entire spectrum of Genito-Urinary care including preoperative, intra-operative and postoperative phases. During this rotation, students will likely encounter the following urologic conditions:

- Prostate: PSA elevation, Benign Prostatic Hyperplasia, Prostate Cancer, Prostatitis
- Urinary tract infections
- Hematuria
- Urinary incontinence
- Urinary stone disease
- Renal masses and cysts
- Urothelial tumors

c. Plastic Surgery Rotation:

By the end of this rotation, students are expected to

- Take an accurate and directed history as well as perform appropriate physical examination.
- Evaluate plastic surgery patients at time of admission, and they should be monitored by the residents who will provide immediate feedback and instruction on the development of an appropriate physician / patient interpersonal and professional relationship, history taking and appropriate physical exam as well as interpretation of appropriate radiographic studies.

During this rotation, students will become more familiar with general aspects of pre- and post-operative surgical care, and develop a knowledge of the special areas of plastic surgery:

- Trauma, involving skin damage or loss, congenital and traumatic defects of face and hand
- breast reconstruction
- burn reconstruction
- general aspects of wound healing and infection as they relate to the skin and open wounds
- An appreciation of flaps and grafts as the tools of reconstruction will be emphasized

d. Neurosurgery Rotation:

By the end of this rotation, students are expected to

- Take an accurate and directed history as well as perform appropriate physical examination.
- Evaluate neurosurgery patients at time of admission, and they should be monitored by the residents who will provide immediate feedback and instruction on the development of an appropriate physician/ patient interpersonal and professional relationship, history taking and appropriate physical exam as well as interpretation of appropriate radiographic studies.

This rotation emphasizes the entire spectrum of neurosurgical care including preoperative, intra-operative and postoperative phases. The following topics may be addressed including:

- Cerebrovascular Surgery: Demonstrate an understanding of the anatomy, physiology, pathophysiology and presentation of cerebrovascular diseases, including ischemic and hemorrhagic stroke, and other diseases and malformations of intracranial, extracranial, and spinal vasculature.
- Neurosurgical Oncology: Demonstrate an understanding of the anatomy, physiology, pathophysiology, and presentation of tumor-related diseases of the cranium.
- Pediatric Neurosurgery: Demonstrate an understanding of the anatomy, physiology, pathophysiology, and presentation of diseases in children which a neurosurgeon may be called upon to diagnose and treat.
- Spinal Surgery: Demonstrate an understanding of the anatomy, physiology, pathophysiology, and presentation of disorders of the spine, its connecting ligaments, the spinal cord, the cauda equina, and the spinal roots.