Educational Course Objectives:

All students participating on this clerkship will meet or exceed the institutional standards for professional behaviors as evidenced by:

- adhering to the dress code consistent with clerkship standards.
- being punctual for all educational experiences (i.e. exams, clinics, rounds, small group sessions, appointments at the clinical skills center).
- fulfilling all educational assignments and responsibilities on time.
- displaying honesty in all interactions and situations.
- contributing to an atmosphere conducive to learning and is committed to advance scientific knowledge.
- establishing and maintaining appropriate boundaries in all learning situations
- using professional language being mindful of the environment.
- establishing effective rapport.
- being respectful at all times of all parties involved.
- resolving conflict in a manner that respects the dignity of every person involved.
- respecting the diversity of race, gender, religion, sexual orientation, age, disability and socioeconomic status.
- exhibiting humanism in all interactions.
- protecting patient confidentiality.
- being aware of and adapting to differences in individual patients including those related to culture and medical literacy
- recognizing personal limitations and seeking appropriate help.
- accepting constructive feedback and making changes accordingly.
- exhibiting independent and self-directed learning.

At the end of the 10-week Surgery, medical students will be able to:

1. Treat patients, their families, staff and teachers with respect and sensitivity, being particularly aware of cultural norms and age of each person.
2. Describe the fundamentals of basic science (e.g., anatomy) as applied to clinical surgery.
3. Describe alterations of structures and function for surgical diseases.
4. Describe the most frequent clinical, laboratory, x-ray, and pathologic manifestations of common surgical disease.
5. Describe the fundamentals of acute post-operative pain management.
6. Accurately present patient information concerning the patient’s condition, progress and results of laboratory and imaging studies to the health care team (both in the hospital and ambulatory sites).

7. Work with all members of the health care team to assure safe and compassionate care and discharge planning of patients.

8. Describe appropriate consultation as a part of assuring comprehensive care.

9. Participate in obtaining informed consent.

10. Demonstrate the ability to obtain a thorough and accurate surgical history.

11. Demonstrate the ability to perform a physical examination that leads to an appropriate differential diagnosis.

12. Demonstrate the ability to collect, understand, record and describe patient data, write a patient’s history and physical examination, development of a comprehensive differential diagnosis and develop a plan of investigation.

13. Write a complete and accurate daily progress note including interpretation of results of laboratory findings.

14. Perform procedures using universal precautions. These will include venipuncture, intravenous line insertion, insertion of nasogastric tubes and urinary bladder catheters, and suturing simple lacerations.


16. Demonstrate the ability to participate in surgical procedures respecting sterile technique and universal precautions.

17. Evaluate a geriatric patient (age 65 and over) with a surgical diagnosis and develop appropriate plans of investigation and therapy.

18. Evaluate adult patients with emergency surgical problems.

19. Demonstrate the ability to manage intravenous fluid and electrolyte resuscitation/management of surgical patients.

20. The student will be able to list the most common causes of traumatic injuries, eg., driving while intoxicated.

21. The student will be able to discuss ethical consideration in the surgical management of patients.
Required Clinical Experiences:

To help learners achieve these educational course objectives, requirements for both patient type (diagnostic category) and students’ level of involvement have been established. These clinical experiences will be complimented by assigned readings and didactic sessions related to diagnosis and management of patients in each category.

Patient type:

During this clerkship, students are required to recognize symptoms that may signify disease in the following categories, distinguish normal from abnormal findings on physical exam, formulate a differential diagnosis based on signs and symptoms, use and interpret common tests used in diagnosing disease and develop a systematic approach to management of these common diseases. This provides the core of the surgery experience. All categories are required and considered essential as part of an introduction to surgery. Patients are seen in both inpatient and ambulatory settings. Students must log all patient encounters and logs will be monitored to ensure adequate experience.

<table>
<thead>
<tr>
<th>Diagnostic category</th>
<th>Number of Patients to be seen</th>
<th>Comments/Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdomen-Biliary</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Abdomen-General</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Abdomen-Hernia</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Abdomen- Liver, pancreas and spleen</td>
<td></td>
<td>Desirable but not essential</td>
</tr>
<tr>
<td>Alimentary tract- Rectal</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Alimentary tract- Esophagus</td>
<td></td>
<td>Desirable but not essential</td>
</tr>
<tr>
<td>Alimentary tract- Large intestine</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Alimentary tract- Small intestine</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Alimentary tract- Stomach</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Breast</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Trauma</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

The following categories will be encountered during the 3-week selective rotation. All are desirable and none required for successful completion of the surgery clerkship.

Endocrine
Genito-urinary
Gynecology
Head/neck
Neurosurgery
Ophthalmology
The following procedures will be encountered during the clerkship. The numbers reflect the minimum number required for the clerkship:

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Number of patient to be seen</th>
<th>Comments/Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Foley catheter insertion</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Male Foley catheter insertion</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nasogastric tube insertion</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Peripheral IV</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Staple removal</td>
<td></td>
<td>Desirable but not essential</td>
</tr>
<tr>
<td>Abdominal Exam</td>
<td>2</td>
<td>Verification signature required by faculty</td>
</tr>
</tbody>
</table>

**Level of involvement:**

In addition to seeing patients in the diagnostic categories listed above, how the students are engaged in the encounter is also an important factor in helping students achieve the objectives for this clerkship. Level of involvement is likely to include various types of interaction with patients and the health care team and should be monitored to ensure a complete experience. Levels of involvement will be indicated for logged patient encounters. The logs will be reviewed mid-block to ensure that students have a range of experiences in both in-patient and/or out-patient settings.

Level of involvement during patient encounters will be logged using the following categories:

- Independently gathered history information*
- Observed patient interview
- Independently performed physical exam*
- Observed physical exam
- Presented patient case*
- Wrote patient note*
- Opportunity to discuss laboratory or test results*
- Opportunity to offer and discuss differential diagnosis*
- Opportunity to offer and discuss management options*
- Observed procedure
- Performed procedure
For the levels of involvement marked with an (*) the following numbers are recommended to get the full benefit of clerkship experience and should be reflected in the logs:

<table>
<thead>
<tr>
<th>Activity:</th>
<th>Elicit History information</th>
<th>Perform Physical Exam</th>
<th>Present patient</th>
<th>Recommend or discuss dx, tx, management</th>
<th>Interpret tests</th>
<th>Write notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency:</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>45</td>
</tr>
</tbody>
</table>

**Other Clerkship Experiences:**

In addition to required clinical experiences (patient type and level of involvement), successful completion of the clerkship requires student participation in a variety of additional experiences. These experiences are coordinated through the Department of Surgery and include lecture/discussions and presentations.

During this clerkship, all students are required to:

- Attend and participate fully in experiences located in ambulatory and in-patient settings by evaluating patients, engaging in inquiry based learning and independent study.
- Use the electronic, web-based, database to keep a log of required clinical experience and document the types of patients seen and the level of responsibility. Procedures and educational hours will also be logged.
- Attend and fully participate in 20 hours of formal didactic lectures designed to provide an overview of surgery related topics, including basic science and surgery subspecialties.
- Attend and fully participate in the department’s Suture/Knot tying lab.
- Obtain mid-block formative feedback review concerning individual progress.
- Submit an ethical consultation note.
- Participate in an Objective Structured Clinical Exam/Oral Exam. Successfully pass clinical skills/procedural assessment.
- Perform two abdominal examinations personally observed by a faculty member.