AY 2024-2025
Surgery Clerkship

Clerkship Description
We hope that your time on the Surgery Clerkship is informative as well as enjoyable. Remember, each core clerkship is designed to train you on the overall principles and practice of the specialty. To be a well-rounded physician, one should immerse themselves in the rotation even if you may not be choosing that field as your area of future practice. The department also wants to help the students perform well on the NBME exam and an experiential learning approach should help to achieve this goal. Be prepared by doing your background reading, know about your patients, and show up with a positive attitude for an optimal learning experience. Work hard and have a great time on the rotation! Please make sure to review the Common Clerkship Policies and the Student Handbook.

Clerkship Objectives

Medical Knowledge
Goal: The student will gain and develop an effective understanding of the assessment and management of patients with common surgical conditions in the inpatient and outpatient (clinic) setting. The learner should demonstrate the ability to acquire, critically interpret, and apply this knowledge.

Objectives: The student will know the following anatomical considerations at the MS 3 level:
- The basic anatomy of the abdomen including its viscera and anatomic spaces (2.1)
- The anatomy of the chest, including the heart and lungs (2.1)
  The student will know, at the MS3 level, the diagnostic criteria for commonly occurring disorders (2.1-2.4)

Patient Care
Goal: The students must be able to provide patient-centered care that is age-appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

Objectives: The student will perform the history and physical examination pertinent to the patient with surgical illness and will participate when possible in the operative procedure(s) on patients he/she has personally examined and managed. By the end of the surgery Clerkship, the student will demonstrate the ability to:
- Consistently obtain a reliable history and perform an appropriate physical examination (1.1, 4.1)
- Develop a problem list, differential diagnosis, and plan for treatment (1.2, 1.3, 3.4)
• Actively participate in the pre-operative and post-operative management of patients examined and evaluated (1.1,1.6, 7.2, 7.3)
• Utilize diagnostic testing and imaging resources effectively and efficiently (1.3, 1.6)
• Demonstrate knowledge of surgical scrub, sterile technique, proper attire, and proper conduct in the operating room (2.2, 5.1, 5.7)
• Demonstrate the correct handling of tissues, techniques of wound closure, and the selection of suture materials appropriate to the clinical situation (1.4, 1.6, 2.3)
• Correctly use common surgical instruments (1.6)
• Demonstrate the ability to evaluate and provide appropriate care of trauma patients (1.1-1.5)

Interpersonal and Communication Skills

Goal: The student will develop knowledge of specific techniques and methods that facilitate effective and empathic communication with patients and their families, faculty, residents, staff, and fellow students.

Objectives: During this Clerkship experience, the student will demonstrate the ability to:
• Communicate effectively with patients and their families (4.1, 4.3, 5.1)
• Appropriately utilize interpreters, if necessary to communicate with patients with limited English language proficiency (4.1, 4.3, 5.1)
• Communicate effectively and respectfully with physicians and other health professionals in order to share knowledge and discuss management of patients (4.2)
• Record history and physical examination findings in an organized manner and in an accepted format (1.7)

Professionalism & Ethics

Goal: Students must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

Objectives: During this Clerkship experience, the student will demonstrate the ability to:
• Maintain grooming and dress appropriate to setting (5.1, 5.2)
• Maintain confidentiality and respect patient privacy (5.1, 5.2, 5.3, 5.6)
• Manage personal biases in caring for patients of diverse populations and different backgrounds (4.1, 4.3, 5.1)
• Recognize how biases may affect care and decision-making (5.2, 5.4, 5.5)
• Demonstrate honesty in all professional matters (5.1, 5.2, 5.6)
• Meet professional obligations and the timely completion of assignments and responsibilities (5.7)
• Acknowledge mistakes (5.1, 5.2)

Practice Based Learning & Improvements

Goal: The student will understand the application of scientific evidence and accept feedback for continuous self-assessment in the improvement of patient care practices.

Authorship: Dr. Tyroch; Approved by CEPC/M.Francis – April 2024
Objectives: During this Clerkship experience, the student will demonstrate the ability to:
- Demonstrate the use of electronic technology (e.g., PDA, PC, Internet) for accessing and evaluating evidence-based medical information (3.4)
- Accept feedback from the faculty and incorporate this to improve clinical practice (3.3)
- Take initiative in increasing clinical knowledge and skills (3.1, 3.4, 8.5)

System Based Practice
Goal: Students must demonstrate an awareness of medical systems, responsiveness to the larger context and system of health care, and the ability to effectively utilize system resources to provide optimal care. The student will develop an appreciation of supportive health care resources and understand their utilization as part of patient advocacy.

Objectives: During this Clerkship experience, the student will demonstrate the ability to:
- Utilize ancillary health services and specialty consultants properly (6.1, 6.2, 7.1, 7.2)
- Consider risks and benefits of treatment in decision making (6.3)

Personal & Professional Development
Goal: The student should demonstrate an awareness of the principles of altruism, accountability, duty, integrity, respect for others and lifelong learning which are central to medical professionalism. Students should also learn key modalities of self-care, financial management, and leadership.

Objectives: During the Clerkship experience, the student will demonstrate the ability to:
- Understand when to take responsibility and when to ask for assistance (8.1, 5.3, 5.5, 5.6)
- Be proactive in self-directed learning and reflection (5.2, 5.4, 5.7, 8.5)
- Demonstrate flexibility in adjusting to changes and difficult situations (8.3)

Inter-professional Collaboration
Goal: The student should demonstrate an understanding of the multiple members of the patient care team and the importance of working well with other members of the team. The student should be aware of the importance of an integrated and cohesive approach to patient care with members of team as well as nursing, social work and other medical services.

Objectives: During the Clerkship experience, the student will demonstrate the ability to:
- Work with other members of the patient care team and contribute to an assigned team (7.1-7.4)
**Integrated Threads**

Per the clerkship goals and objectives, these integration threads will be encountered throughout the block.

<table>
<thead>
<tr>
<th>X Geriatrics</th>
<th>X Basic Science</th>
<th>X Ethics</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Professionalism</td>
<td>X EBM</td>
<td>X Patient safety</td>
</tr>
<tr>
<td>X Pain Management</td>
<td>X Chronic Illness Care</td>
<td>X Palliative care</td>
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<tr>
<td>X Quality Improvement</td>
<td>X Communication Skills</td>
<td>X Diagnostic Imaging</td>
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<tr>
<td>X Clinical Pathology</td>
<td>X Clinical/Translational Research</td>
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**Clerkship Components**

The Surgery Component of the Integrated Block occurs in the following Settings:

- General Surgery and Trauma - 3 weeks
- General Surgery and Sub-Specialty Focused Selective - 2 Weeks
- Ambulatory (8 weeks combined with OB, Peds, EM, FM)
  - Includes all available Surgery clinics

The student will rotate for 2 weeks on the General Surgery service, 1 week on Trauma/Acute Care Surgery, and will choose one 2-week Selective rotation, which may include general surgery and other surgery subspecialties depending on availability. The Office of Medical Education (OME) will contact you prior to the block to see which specialty you are interested in. You will select your top choices and a “lottery” system will be used to finalize what selective you will be assigned to. OME will also be in charge of any changes and requests that you have regarding your selective. It is a good idea to communicate with the clerkship director about your interests and exceptions can be made depending on your need and availability.

**General Surgery Goals/ Objectives**

Includes Trauma, Critical Care, Surgical Oncology, Bariatric, Vascular, Colorectal, Endocrine, Minimally Invasive Surgery, Pediatric Surgery, and Plastic Surgery.
### General Surgery
UMC or WBAMC

At the end of the clerkship, students should be able to:
- Demonstrate correct handling of tissues, techniques of wound closure and selection and suture materials (1.10)
- Demonstrate knowledge of surgical scrub, sterile technique, proper attire, and conduct in operating room (2.2, 5.7, 5.1)
- Correctly use common surgical instruments (1.10)
- Understand principles of preoperative and postoperative care of surgical patients (2.2-2.3)
- Communicate effectively with patients and families during sign out and transitions in care. (1.4, 4.2)
- Participate in pre-and postoperative management of surgical patients (1.1-1.7)
- Participate in pre-and postoperative management of surgical patients (1.1-1.6)
- Develop a problem list, differential diagnosis and plan for treatment (1.3, 1.6)
- Demonstrate use of electronic technology and hospital based resources (EMR, radiology) for patient care (1.1,1.4)
- Accept feedback from faculty/residents to improve clinical practice (3.1)
- Demonstrate ability to obtain a focused history and appropriate physical exam in a patient presenting for pre- and/or postoperative assessment (1.1)
- Identify patients needing further preoperative assessment, such as risk stratification, “cardiac clearance,” or smoking cessation prior to surgical intervention (1.2-1.4)
- Work with other health professionals in the patient care team (7.3)
- Place intravenous line and draw blood sample for labs with appropriate technique (1.8)
- The student should have a thorough knowledge of the processes leading to the need for operative intervention in children. This includes knowledge of embryology leading to congenital defects as well as the pathophysiology of disease processes affecting children that lead to the need for operative treatment. (2.1-2.3)

### Trauma & Acute Care Surgery
UMC: Dr. Mclean, Dr. Tyroch, Dr. Mercer

At the end of the clerkship, students should be able to:
- Perform a trauma history and physical with primary survey and secondary survey (1.1)
- List causes of shock after trauma (2.1, 2.2)
- Participate in pre-op/post-op/non-operative management of trauma patient encounters and use appropriate initial diagnostic testing. (1.2, 1.3, 1.4, 1.6)
- Communicate effectively by recording trauma history and physical diagnosis, test results, and also communicating to consultants (1.7, 4.2, 4.4)
Selective Rotations

Rotation in the sub-specialties will consist of the student rotating with the specific faculty/residents. The student will be expected to get an overview of the subspecialty. The specific objectives will depend in part on the student’s interest. For example, if a student is rotating on pediatric surgery and is planning on a pediatrics residency, more emphasis will likely be placed on preoperative and postoperative assessment. The students will be expected to attend clinic or office hours with the faculty and attend rounds and OR cases. All faculty make their own schedules.

<table>
<thead>
<tr>
<th>Anesthesiology</th>
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<tbody>
<tr>
<td>THOP: Dr. Buendia or Dr. Minton</td>
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<tr>
<td>UMC: Dr. Mesarch</td>
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<td>EPCH (Peds): Dr. Orlandi</td>
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At the end of the clerkship, students should be able to:
- Understand the principles of pre-operative assessment and successfully perform a minimum of 3 preoperative assessments while observed by faculty anesthesiologist. (1.1, 1.2)
- By week 3 of the anesthesiology selective, a verbal anesthetic plan, including premedication selection and dose, induction plan (including appropriate drug dose and selection) will be communicated to an anesthesiology faculty member for a minimum of 2 patients. (1.6)
- Upon successful completion of the rotation, medical students will have a basic understanding of airway anatomy and management including mask ventilation, intubation and exposure to advanced airway techniques. Each student will be expected to successfully mask ventilate and intubate at least 2 adult surgical patients while being supervised by a faculty anesthesiologist. (2.1, 1.10)
- Demonstrate understanding of preoperative orders for adult surgical patients, including drug selection and dose for analgesia and postoperative nausea and vomiting. (1.2, 1.6)

| ENT |
| TTUHSC: Dr. Skiles |

At the end of the clerkship, students should be able to:
- To expose you to the general field of otolaryngology- head and neck surgery (2.1)
- To teach you how to evaluate and manage some common otolaryngology problems (1.2, 1.3, 1.6)
- To help determine the appropriateness of referral of future patients to an otolaryngologist (7.1, 7.2)
### Neurosurgery
**UMC: Neurosurgeons**

At the end of the clerkship, students should be able to:

- The student should be able to identify the presenting problem, generate a differential diagnosis and indicate a plan for treatment when neurosurgery is consulted in a patient (1.1-1.3, 1.6)
- Demonstrate the ability to perform preoperative evaluation and risk assessment, obtain informed consent, and perform postoperative management including monitoring of key neurologic parameters. (1.2, 1.6, 1.8, 5.2)
- Demonstrate knowledge and ability to adequately scrub in the surgery, maintain a sterile field, and assist the surgeon during a neurosurgical procedure. (1.10)
- Demonstrate the ability to select appropriate diagnostic imaging for a given neurosurgical problem. (1.2, 1.6)

### Orthopedic Surgery
**UMC/EPCH/THOP/WBAMC: Orthopedic Surgeons**

At the end of the clerkship, students should be able to:

- Demonstrate the ability to obtain a basic history and orthopedic specific history. (1.1)
- Understand the relevant parts of a musculoskeletal physical examination and specifically knee and shoulder examinations. (1.1)
- Understand physical exam findings for common orthopedic diagnoses such as ACL tear, meniscus tear, ankle sprain, rotator cuff tear, and carpal tunnel syndrome. (1.1)
- Understand how to interpret and order appropriate radiographic tests for common orthopedic trauma injuries including pilon and tibial plateau fractures (8.1, 8.5)

### Urologic Surgery
**WBAMC: Dr. Olcese**

At the end of the clerkship, students should be able to:

- Demonstrate general understanding of the field of urology, including inpatient and outpatient procedures. (1.8)
- Demonstrate knowledge of common urologic conditions, including initial workup and management of benign and malignant conditions. (1.2, 1.6, 2.1)
- Demonstrate understanding of indications for referral to an urologist. (7.1, 7.2)
- Demonstrate ability to perform an appropriate focused history and exam for urologic complaints (1.1)
OPSF

Colorectal Surgery
UMC & THOP: Dr. Wicker

At the end of the clerkship, students should be able to:

- Gain knowledge of diagnosis, management, treatment options (surgical/non-surgical), long-term prognosis, complications, patient risk, and cost considerations associated with general concerns of the colorectal patient.
- Demonstrate knowledge of anal/rectal function, to include normal physiologic functions of the colon, rectum, and anus, and the disorders that may cause abnormal function.
- Gain knowledge of anorectal diseases including hemorrhoids, anal fissure, anal rectal abscesses and fistula, pruritus ani, and condylomata acuminate
- Demonstrate knowledge of tumors of the colon, rectum, and anus, including the diagnosis, staging, and treatment options for these diseases.
- Gain knowledge of diagnosis and treatment of colorectal injuries including foreign bodies.
- Demonstrate knowledge of dysfunctional problems of the colon and rectum to include rectal prolapse, volvulus of the cecum or sigmoid colon; and megacolon secondary to laxative abuse.
- Gain knowledge of chronic inflammatory bowel disease including the diagnosis, non-surgical management, and surgical treatment for complications of ulcerative colitis and Crohn’s disease.
- Demonstrate knowledge of infectious diseases involving the colon and rectum to include diagnosis and management of sexually transmitted diseases and acute infections.

Pediatric Surgery
EPCH: Dr. Walker, Dr. Howe, and Dr. Spurbeck

At the end of the clerkship, students should be able to:

- Demonstrate the principles of pre- and post-operative management of children requiring operation. The student needs to understand that children are not just small adults, and therefore the same care of patients learned by the student in treating adults cannot necessarily be transferred in “smaller doses” to the care of children with operative problems. (1.2, 1.6)
- Gain knowledge of the processes leading to the need for operative intervention in children. This includes knowledge of embryology leading to congenital defects as well as the pathophysiology of disease processes affecting children that lead to the need for operative treatment. (2.1-2.3)
- Actively participate in the intra-operative care of the patient including learning some basic surgical techniques and actively visualizing techniques that are more complicated. (1.8)
- Demonstrate how to compassionately relate to children and their families as they realize that they, as doctors, are not treating a disease entity or a congenital defect, but a living, breathing child in need of operative treatment. (4.1, 5.1)
### Plastic Surgery
**UMC & EPCH: Dr. Nemir, Dr. Castro, and Dr. Diamond**

At the end of the clerkship, students should be able to:
- Learn anatomy of soft tissues/musculoskeletal system (2.1)
- Understand the wound healing/repair process (2.2)
- Demonstrate different suturing techniques (1.10)
- Gain understanding of basic concepts relating to: pediatric and plastic surgery, breast cancer reconstruction, wound management/soft tissue coverage, difference between a flap and graft as it relates to management of skin malignancies. (2.2, 2.3)

### Vascular Surgery
**UMC: Dr. Aidinian and Dr. Daneshpajouh**

At the end of the clerkship, students should be able to:
- Understand the natural history of common vascular problems including but not limited to aneurysms/dissections, carotid stenosis, renal artery stenosis, Peripheral Arterial Occlusive Disease, Diabetic foot, Peripheral venous insufficiency, and Vascular Trauma.
- Demonstrate knowledge about the indications and outcomes for common vascular operations (open and endovascular).
- Have a good knowledge about all of the patients on the service (pre-round with the resident on service).
- Utilize textbooks, journal article and internet tools to learn the principles of vascular surgery during the rotation.
- Interact successfully with the vascular team (NPs, clinic staff) and participate fully in clinical activities of the vascular service.
- Demonstrate sensitivity to and awareness of the impact of the patient’s culture, values, age, and gender, and disabilities.
- Demonstrate compassion, integrity, and respect for others and recognize her/his own limitation(s) and take personal responsibility.

### Bariatrics Surgery
**THOP: Dr. Chiba and Dr. Clapp**

At the end of the clerkship, students should be able to:
- Demonstrate knowledge of different types of metabolic surgery including sleeve gastrectomy, gastric bypass, gastric band, and gastric balloon.
- Learn the management of upper gastrointestinal conditions addressed by laparoscopy including reflux disease, hiatal hernias, and achalasia.
- Discuss surgical complications secondary to metabolic surgery and the treatment and management of such complications.
- Learn the management of morbid obesity, including screening, diagnosis, medical and surgical treatments options, and follow-up.
Locations & Instructions for General Surgery Rotation

During this rotation, students will be rotating at UMC and the TTP El Paso Clinics. Please view the schedule marked “Typical Weekly schedule for Surgery Rotation.” Students are assigned to various services and will work with the other residents on the team. The students will cover in-patients at UMC and outpatients in the TTP El Paso clinics for whichever service they are assigned. Rounds and cases start in the morning. There will be no more than one week of night call assigned while on the General Surgery rotation. Surgery Conference is on Thursday mornings and students must attend. Clerkship didactics are every Friday afternoon and will be included on your schedule. Students are required to assist with weekend (Saturday and/or Sunday) rounds. Duty hours will be strictly followed and the student should communicate with the chief residents if they are likely to go beyond the allowed hours. The start time on weekend rounds is flexible and depends on the number of patients the team needs to round on. Please contact the Sr. Resident for start times for Saturday rounds. Students should scrub with attending’s on their service primarily-if all cases are covered, student should scrub on other specialty cases of their choice if a student is not assigned.

Scheduling

*Typical Weekly Schedule for Teams: This is a rough approximation of the schedule. Please follow what the resident instructs you to do. Clinic day will be on your schedule via PLFSOM Schedler15.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Sat/Sun</th>
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<tbody>
<tr>
<td>5-7:30am Work Rounds</td>
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<td>5-6:30am Work Rounds</td>
<td>5-7:30am Work Rounds</td>
<td>5-7:30am Work Rounds</td>
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<td>5-6:30am Work Rounds</td>
<td>5-7:30am Work Rounds</td>
<td>5-7:30am Work Rounds</td>
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<tr>
<td>7:30-8am Morning Report</td>
<td>7:30-8am Morning Report</td>
<td>7:30-8am Morning Report</td>
<td>6:30-7am Morning Report</td>
<td>7:30-8am Morning Report</td>
<td>7:30-8am Morning Report</td>
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<tr>
<td>8-4pm OR cases, follow-up on orders, patient care, clinic</td>
<td>8-4pm OR cases, follow-up on orders, patient care, clinic</td>
<td>8-4pm OR cases, follow-up on orders, patient care, clinic</td>
<td>7am-1pm Protected Time Education Didactics</td>
<td>8-12pm OR cases, follow-up on orders, patient care, clinic</td>
<td>8-12pm OR cases, follow-up on orders, patient care, clinic</td>
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<tr>
<td>4-5:15pm Checkout Case Assignments</td>
<td>4-5:15pm Checkout Case Assignments</td>
<td>4-5:15pm Checkout Case Assignments</td>
<td>4-5:15pm Checkout Case Assignments</td>
<td>1-5pm Clerkship Didactics</td>
<td>1-5pm Clerkship Didactics</td>
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</tbody>
</table>
Daily Responsibilities:

- When not in the OR:
  - Call/text the intern on the floor to assist with floor work.
  - Pull drains, do tertiaries, check orders, talk with social worker, physical therapist, occupational therapist, speech therapist, consultant notes, and new imaging.
  - Check your patients for any changes- (generally 30-45 minutes from patient leaving OR to the new patient entering the OR being intubated.
  - Pay attention to TSA’s (Time/Space Available cards) which can change throughout the day (do not pay attention to start times). Cases may be added on during the day. Make sure they are covered.
  - Make sure all cases are covered. For example, if scheduled for 0800 with one attending, do not schedule yourself for a case with a second attending that is “scheduled” to start at 1100 because it may actually start earlier at 1000, and you may not be out of the first surgery. It is best to be guided by the senior surgical residents as to the assignments.

- PM Sign-out:
  - At the end of the day: go to PM sign-out at 1700 in the ICU conference room. When going over your patient, be prepared to talk about the details of what happened during the day. Give updates on their status, ask questions, and voice concerns. When your team is done, checking out you may leave.
  - If OR cases are still going on, students are still expected to cover them. If cases are starting right before PM sign-out, it is okay to miss sign-out to scrub the case. Please let another student know so they can inform residents if asked during sign-out. If a case from the day will start at 1800 hours or later, the night trauma medical student can scrub the case.

- Preparing:
  - Remember to ask about the next day’s surgeries in order to prepare. Discuss case assignments with your respective senior to better prepare. Always read about the case prior to surgery so you have an idea of what is going on, including relevant anatomy and patient details.
  - If there are several students on the service, discuss with each other who will scrub which cases. Ideally, scrub into a case with an attending from your corresponding team so that you can round on your patient the next morning.

William Beaumont Army Medical Center (WBAMC):
Students may be assigned to WBAMC for a 2-week General Surgery rotation. This experience will be comparable to that of the rotations at UMC or the Private Clinic Selective.
On behalf of the staff surgeons, welcome to WBAMC for your general surgery rotation! Whether you are here from near or far, civilian or HPSP, MD or DO school, we are glad you are here and hope you have a valuable experience on your rotation. Here are a few guidelines to follow while you’re here, but these are by no means all of the details. In many ways, your rotation is what you make of it. If you want to sit back and observe from the rear, then you will have an “observer’s” experience. If you are more aggressive and ask to participate, you can have a “hands-on” experience. We know that not everyone wants to become a surgeon (but we hope to inspire some of you to that goal), but we ask that you participate as much as possible to get what may be one of your only exposures to the world of surgery.

WBAMC Scheduling
You will be assigned to one of two General Surgery teams (East or West). You are limited to an 80-hour work week as per the TTUHSC El Paso Common Clerkship policies and Student Handbook. In general, this will limit you to 12-hour days (approximately 60 hours per week). That leaves you 20 hours of extra time for days that run late due to interesting cases or longer team rounds. Be flexible, but monitor your hours. Students are not required to assist with weekend rounds unless otherwise specified by the Senior Resident on your team.

Daily Schedule (Example):

<table>
<thead>
<tr>
<th>Daily Routine: M/Tu/Th/F:</th>
<th>06:45 Rounding with your team at a time designated by your chief resident</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>07:30 Operating Room two days per week</td>
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<tr>
<td></td>
<td>08:00 Clinic two days per week</td>
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<tr>
<td></td>
<td>15:00 Lecture</td>
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<tr>
<td></td>
<td>Afternoon: PM rounding with your team at a time designated by senior or chief resident</td>
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<tr>
<td></td>
<td>Friday Afternoons (13:00-17:00): Clerkship Didactics</td>
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</table>

<table>
<thead>
<tr>
<th>Daily Routine on Wednesdays:</th>
<th>Rounds with your team followed by your academic day:</th>
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<tbody>
<tr>
<td></td>
<td>07:00 Resident Lecture</td>
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<tr>
<td></td>
<td>08:00 M&amp;M Conference</td>
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<td></td>
<td>09:00 Pre-Op Conference</td>
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<td></td>
<td>10:00 Pre-Op Clinic OR Vascular Lecture OR SICU Rounds</td>
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<td></td>
<td>13:00 Tumor Conference</td>
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<td></td>
<td>Afternoon: Team rounds with staff</td>
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Trauma and Acute Care Surgery (TACS) Week- Days or Nights

The students will be assigned to work with the Surgical Consult and Trauma Service for shifts (day or night) during their General Surgery Rotation or as a selective. They will assist the team with trauma and acute care surgery admissions and OR cases. Students will be able to see orthopedic cases with the Orthopedic resident on call when there are no general surgery trauma cases needing their assistance.

On arrival, students will need to notify the Consult Surgery Resident and the Orthopedic Resident they are available to assist with patient care. Please refer to the resident call schedule. Students will stay in the hospital actively participating in patient care until the end of their shift at which time they should check out with the general surgery consult resident before departing. On Thursday evening, students are to leave at midnight in order to be rested for didactic sessions on Friday afternoon. Students are expected to see at least five trauma patients and log them into the Op-Log.

Some helpful tips while rotating on Trauma:

- See chief resident for reporting time and place
- Assist by seeing consults prior to resident and present your findings/plan.
- Review radiology images with the resident
- Perform rectal exams and Foley catheter insertions with resident and nurse supervision
- Suture lacerations in the ED with supervision
- Scrub into any case that is starting after 1800 hours with the resident. Usually one student per case. It is okay to scrub in with the neurosurgeon, OMFS, and Orthopedics
- For Level 1 traumas, stay outside the trauma bay initially unless asked to come in by the trauma resident. Make sure to have all PPE on and be ready to walk into the room to assist when you are asked to do so. Stay away from the doorway/heavily-trafficked areas during the primary survey. For the secondary survey, ask the senior resident to go into the trauma bay to help with Foley catheter insertion, OG tube placement, and rectal exam.
- If no consults are pending, floor work is completed, and no OR cases are pending, students can study in the basement lounge. Remember to check in with the surgery intern regularly to help.
- When at the CT scanner, do not bring any food, personal belongings, or backpacks. Respect the CT technician’s workspace. Do not touch or use their printer, equipment, or supplies.
Ambulatory Surgery Clinic
During the ambulatory surgery clinic, students will be able to:

- Learn and demonstrate principles of peri-operative care of the surgical patient including pre op work up and post op care. (1.2, 1.8)
- Demonstrate understanding of appropriate use of ancillary health services and specialty consultants (7.1-7.3)
- Work with other members of patient care team (7.3)
- Demonstrate understanding of normal wound healing and local wound care (2.2, 2.3)

Op Log/Procedure Log Expectations
The procedures listed in Appendix C are required.

You may not receive honors if your procedure log is not complete by end of clerkship. If you feel you will not perform the appropriate number of procedures, try hard again to locate an appropriate patient. If you cannot, contact one of the Clerkship Directors. You can do these procedures under the supervision of a nurse, certified registered nurse anesthetist (CRNA), resident or faculty physician. You may do a dressing change under the guidance of a wound care nurse. Procedures may be done in the inpatient or outpatient clinical setting. Below are some tips to help you. Remember, you need to be in the OR early in order to do these procedures – if you show up when the attending or resident are scrubbing, then you have missed your opportunity. You should enter the OR when the patient does and be ready to assist. Be proactive, ask to do these procedures, and gather your supplies in advance.

- Most patients receiving general anesthesia in the operating room will have an orogastric tube (OG tube) placed.
- Foley catheters are placed on many patients getting hernia repairs, laparoscopic surgery in the lower abdomen (to decompress the bladder) or for cases such as neck dissections, bilateral mastectomies (cases that are long). This can help guide you as to which cases may be more likely to get Foley catheters.
- Rectal exams can be found on cases posted as exam under anesthesia (EUA), fistulotomy, hemorrhoidectomy, abdominoperineal resection (APR), low anterior resection (LAR), and any colonoscopies done by the surgeons.

In the very rare instance a student is unable to complete their OpLog requirements, he/she should contact the Clerkship Director as early as possible to facilitate a clinical experience for that clinical diagnostic category. If a clinical experience cannot be found to fulfill that diagnostic category, a simulation (procedure log) or written assignment will be arranged. If a substitute simulation and/or assignment is needed, the student may not be eligible to receive honors.
Students are expected to do the following with Indirect Supervision once competency is demonstrated:

- H&P (excluding Pelvic, breast and other sensitive examinations)
- Daily physical exams to monitor progress of the patient
- Scrubbing at operations (refers to sterile precautions and assisting, NOT performing the procedure)
- Removal of sutures
- Wound dressing changes

The following procedures need to completed with help and hands-on direct supervision of a physician. Female chaperone should be present for all female patients.

- Closure of skin incisions or lacerations, excluding facial laceration
- Foley Catheter Placement
- OG Tube Placement
- Rectal Exam

**Op-Log Expectations**

Please document all significant patient encounters (not necessarily scrubbed for that operation) in the Op-Log. Expectations are that you will have at least 30 Surgery specific encounters during the Clerkship. You may not receive honors if your Op-Log is not complete by end of clerkship. A clinically significant encounter is any encounter in which you participate enough to document a note or help significantly. Examples are: history and physical exam, daily progress note, surgery clinic focused history and physical and note, attendance at an OR case, attendance at trauma activation, attendance at a surgery consult at night, suturing a laceration. Encounters in which you are not involved directly should not be logged. For example, if you are following a resident and that resident goes to the floor to follow-up on an admission, you should not record that even if you watch the resident. However, you can document a new admission in which you participate in the history and physical.

**Assessments**

**Mid-Clerkship Feedback**

Assessments will occur on an ongoing basis. You will meet with assigned faculty and/or the Surgery Clerkship Director for Mid-Clerkship feedback. This will be a formative assessment which will enable you to improve for your final summative assessment at the end of the clerkship. During this meeting, you will receive feedback regarding your performance and will have the opportunity to provide feedback regarding your experience in the clerkship up to that point. Your assessments, Op-Log and Procedure Log will be reviewed, so please have them up to date and have your procedure log with you. The Surgery Clerkship Program Coordinator will
provide a copy of your Op-Log. Other topics to be reviewed will include your study strategy for the NBME, absence requests, make up time (if needed) and any other issues that may be pertinent. The Surgery Clerkship Program Coordinator will contact you to schedule your meeting. If you are rotating at WBAMC, you will receive your mid-clerkship feedback from the faculty there.

Final Assessment
Grades for surgery should be available approximately three to four weeks after the conclusion of the rotation. Honors-level work includes engaged participation, evidence of reading, and active learning. Students should also take the initiative to see patients (if applicable), and improve their clinical skills by consistently applying new knowledge in the clinical arena. Below is a summary of how you will be assessed weekly. The assessments will be aggregated for your final grade. There will be a comments section to highlight strengths and areas for improvement.

- Medical knowledge
  - Demonstrates knowledge of normal anatomy in surgical context.
  - Recognizes surgical pathology
  - Can discuss evidence-based principles in surgical care, including pre-op testing and care, choice of surgical intervention, and post-op care

- Patient Care
  - Completes an appropriate history
  - Exam is appropriate in scope
  - Generates a comprehensive list of diagnostic considerations based on the integration of historical, physical, and laboratory findings
  - Identifies serious conditions that require timely and specific interventions
  - Develops a treatment plan appropriate to the patient
  - Organize and prioritize responsibilities in order to provide care that is safe, effective, and efficient

- Interpersonal and Communication Skills
  - Communicates clearly with patients, families, etc.
  - Presentations to faculty or resident are organized

- Practice-Based Learning and Improvement
  - Takes the initiative in increasing clinical knowledge and skills, for example, identifies a learning issue on rounds or in the OR and reports back to the team/resident
  - Receptive to constructive criticism

- System-Based Practice
  - Incorporate consideration of benefits, risks, and costs in patient care
  - Demonstrate the ability to work with social worker or case manager to identify
community based resources for their patients.

- **Professionalism & Ethics**
  - Is reliable and dependable (reports for duty on time and stays on duty until expiration of duty hours or until dismissed)
  - Acknowledges mistakes
  - Displays compassion and respect for all others regardless of age, race, ethnicity, gender, sexual orientation, etc.
  - Demonstrates honesty in all professional matters
  - Protects patient confidentiality
  - Dress and grooming appropriate for the setting

- **Personal and Professional Development**
  - Recognizes when to take responsibility and when to seek assistance

**Final Clerkship Assessment**

*All competencies graded as: Needs improvement, Pass, or Honors*

<table>
<thead>
<tr>
<th>Competency</th>
<th>Source</th>
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<tbody>
<tr>
<td>Patient Care &amp; Procedural Skills</td>
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<tr>
<td>Knowledge for Practice</td>
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<tr>
<td>Interpersonal &amp; Communication Skills</td>
<td>Ongoing Evaluations</td>
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<tr>
<td>Practice-Based Learning &amp; Improvement</td>
<td>Evaluation Cards</td>
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<tr>
<td>System-Based Practice</td>
<td>Combined/Integrated Case Presentations</td>
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<tr>
<td>Professionalism</td>
<td>Clerkship Unit Coordinator Evaluation</td>
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<tr>
<td>Inter-professional Collaboration</td>
<td>Op-Log/Procedure Log completion on time</td>
</tr>
<tr>
<td>Personal and Professional Development</td>
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</tbody>
</table>

*Comments – Help justify competency grades. Can be taken from the weekly evaluations.*

Boxes at the bottom of Final Assessment include:

- NBME Score
- OSCE
- MSPE Comments
- General Comments (Optional and not for MSPE)
- Final grade for Clerkship – Honors, Pass, Fail.

Authorship: Dr. Tyroch; Approved by CEPC/M.Francis – April 2024