

**IM 660**  
**INTERNAL MEDICINE**  
**SUB-INTERNSHIP**

**CLERKSHIP REQUIRED ROTATION (R2) SYLLABUS**  
Honors/High Pass Option Available

OSTEOPATHIC MEDICAL SPECIALTIES  
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*At Michigan State University College of Osteopathic Medicine (MSUCOM), we are constantly working to improve our curriculum and to meet new AOA accreditation guidelines. We need to meet the challenges of modern medicine that force us to innovate. While changes will generally be instituted at the beginning of the school year, changes may also be implemented semester to semester.*

***Please be mindful of the need to read your syllabi before beginning your rotations.***

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## **INTRODUCTION AND OVERVIEW**

Welcome to IM 660 Sub-I clerkship, which is one of the two or three core Internal Medicine (IM) rotations you will complete successfully during your clerkship years. Our internal medicine team has collaborated to offer selected topics in IM for your study through a series of two or three required clerkship rotations - IM 650 (inpatient IM rotation #1) and IM 660 (sub- internship or Sub-I inpatient IM #2). Students will also participate in a primary care core rotation in year 3 of the clerkship year; either IM 658 (Out-patient IM #1 or its equivalent FM 622) may be scheduled as that primary care core rotation. IM 650 must occur before IM 660 and is highly recommended, but not essential that IM 658 occur before IM 660. IM 660 should be completed after IM 650 and should NOT occur prior to the 4th month of the third year to allow adequate exposure to inpatient medicine for the medical student. It is intended to be an advanced rotation involving patients in intensive care units, with higher expectations of the student for performance.

MSUCOM has developed a model medical curriculum that provides an academic environment within the base hospitals. The internal medicine faculty are passionate about medicine and medical education. This rotation is a balance of clinical encounters, didactic sessions and reading assignments. This blend will provide you with a solid foundation in your approach to internal medicine. The more interest you demonstrate in learning, the more teaching you will receive. By completing the two or three internal medicine rotations you will be able to achieve the objectives that will be covered in internal medicine.

You will find included in this syllabus valuable information needed to matriculate through your four week Sub-I rotation. (Sub-I stands for Sub-internship and implies greater responsibility and expectations). During the third year, sub-I students will rotate as a part of the medical team at their designated hospital. The students will work primarily with the preceptor and with intern/resident physicians when applicable as part of the team caring for patients. Students will be expected to write history and physicals on new admits and daily progress notes. Medical students are expected to participate in direct patient care on the hospital floors, although final responsibility and decision-making rests with the attending physician. As a third year sub-I medical student more emphasis will be placed on student responsibility and your ability to manage complicated internal medicine patients.

Students are required to attend daily didactics that may include morning reports, noon conferences, faculty grand rounds, resident grand rounds, hematology rounds, cardiology rounds and faculty lectures. In addition to in hospital requirements medical students will complete a series of modules and assignments designed to broaden their scope of internal medicine and prepare for exams. These modules/reading assignments will require about four hours per week outside of regular clinical rotations. Attendance and punctuality during all aspects of clinical clerkships are expected and considered an important part of a student's evaluation. Students, like house staff, are expected to fulfill their educational responsibilities and their patient care responsibilities.

### **ROTATION FORMAT**

During the internal medicine rotation, the student will be responsible for reviewing all content pertaining to the topics and completing the corresponding quizzes. The content is meant to be a complete overview of a topic, with up-to-date medical information, which would prepare a PGYI to present on that topic to an attending; while also providing a framework for patient evaluation, work up, and treatment. Overall, the activities are meant to sharpen the student's understanding of that topic, how it is approached, and application of that knowledge in a hospital setting.

## GOALS AND OBJECTIVES

### GOALS

The general goal of clerkship is to provide the environment needed for students to develop into knowledgeable and sympathetic physicians.

The following is a list of the knowledge, skills and behaviors students should possess upon completion of the clerkship.

- 1. HISTORY TAKING: Obtain an accurate, efficient, appropriate, and thorough history.**  
This clerkship will emphasize the development of intermediate level history taking skills. It will emphasize strategies and skills for the efficient elicitation of histories appropriate to the care of adult patients presenting with medical problems in the inpatient settings. Particular attention will be given to identification and elicitation of key historical data pertinent to immediate clinical decision-making.
- 2. PHYSICAL EXAM: Perform and interpret findings of a complete and organ-specific exam.**  
This clerkship will focus on development of intermediate-to-advanced physical examination skills (especially in the areas of cardiovascular, pulmonary, musculoskeletal, Nephrology and gastrointestinal diseases) pertinent to the clinical evaluation of adults presenting with medical problems in the inpatient settings. It will emphasize elicitation of physical findings pertinent to differential diagnosis and immediate clinical decision- making.
- 3. DIAGNOSTIC EVALUATION: Interpret data from laboratories and radiology demonstrating knowledge of pathophysiology and evidence from the literature.**  
This clerkship will emphasize interpretation of basic tests used in the evaluation of adult medical patients presenting with medical problems in inpatient and outpatient setting. Principles of clinical epidemiology will be used to facilitate test interpretation, especially as they relate to determination of post-test probabilities and contribution of test results to differential diagnosis.
- 4. DIAGNOSIS: Articulate a cogent, prioritized differential diagnosis based on initial history and exam.**  
A prime learning objective of this clerkship will be the formulation of a prioritized initial differential diagnosis based on the history and physical examination for common medical problems of adult patients presenting in inpatient settings. Differential diagnosis of common systemic, cardiac, pulmonary, gastrointestinal, renal, endocrine, metabolic, rheumatologic, neoplastic, and infectious disease problems will receive particular emphasis.
- 5. MANAGEMENT: Design a management strategy for life threatening acute, and chronic conditions demonstrating knowledge of pathophysiology and evidence from the literature.**  
This Core IM rotation will focus on basic management of the common medical problems of adults presenting to inpatient and ambulatory settings, with reference to the relevant pathophysiology and best scientific evidence. Please see the list of 21 content objectives for the IM clerkships.
- 6. PROCEDURES: Performing routine technical procedures.**  
Students will be taught the basic procedures used in inpatient care of adult medical patients, including procedure indications, contraindications, techniques, complications, and interpretation of any findings that result. Examples of procedures include: Evaluate one patient with in-hospital fall,

and be able to discuss the relevant evaluation, review for anticoagulant use and discuss the necessity of brain imaging with your supervising physician; assist with the insertion of one arterial line or central line; arterial blood gas results interpretation and suggested management of results to restore homeostasis; and attendance at one Rapid Response Team event or Code Blue (cardiac arrest in house event) with performance of CPR if allowed..

7. **COMMUNICATION: Presenting patient information concisely, accurately and in timely fashion to members of a health care team in a variety of settings and formats including verbally and in writing.**

This course will emphasize effective written and oral presentation of pertinent clinical information (including differential diagnosis, assessment, and plan) for the care of adult patient. Particular attention will be given to adapting the presentation to the issue at hand.

8. **CULTURAL COMPETENCE: Understanding of the disease with respect to the cultural, socioeconomic, gender and age-related context of the patient.**

Core IM will stress how doctor-patient relationship is influenced by a variety of factors. Special emphasis will be placed on conducting patient interviews with sensitivity towards cultural differences as well as impact these may have on disease evaluation and management.

9. **PROFESSIONALISM:**

This rotation will emphasize aspects of professionalism related to interaction with patient, colleagues, and staff. Examples of professional behavior include being on time and prepared for rounds and didactic sessions, putting patients' needs first and willingness to assist your colleagues and staff, ability to self-assess, responsiveness to constructive criticism and time management skills.

## OBJECTIVES

Overall Objectives:

1. Provide the student with the fundamental knowledge base in internal medicine.
2. Introduce the student to basic procedures relevant to the practice of internal medicine.
3. Facilitate an understanding of the approach to acute care clinical problem solving.
4. Promote the acquisition of simple basic skills for the diagnosis and management of common internal medicine cases.
5. Encourage the continued development of the student's professional attitude and behavior.

## COMPETENCIES

The Core Competencies were developed by the AOA to represent seven defined areas. In 2012, the American Association of Colleges of Osteopathic Medicine developed a document to assist colleges in integrating these same core competencies into medical education at the medical student level. The following core competencies are addressed during the month of Out-Patient Internal Medicine:

1. Osteopathic Principles and Practice

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- Approach the patient with recognition of the entire clinical context, including mind-body and psychosocial interrelationships.
  - Diagnose clinical conditions and plan patient care.
  - Perform or recommend OMT as part of a treatment plan.
  - Communicate and document treatment details.
2. Medical Knowledge
    - Articulate basic biomedical science and epidemiological and clinical science principles related to patient presentation.
  3. Patient Care
    - Gather accurate data related to the patient encounter.
    - Develop a differential diagnosis appropriate to the context of the patient setting and findings.
    - Form a patient-centered, inter-professional, evidence-based management plan.
    - Health promotion and disease prevention (HPDP)
    - Documentation, case presentation, and team communication
  4. Interpersonal and Communication Skills
    - Establish and maintain the physician-patient relationship.
    - Demonstrate effective written and electronic communication in dealing with patients and other health care professionals.
    - Work effectively with other health professionals as a member or leader of a health care team.
  5. Professionalism
    - Demonstrate humanistic behavior, including respect, compassion, honesty, and trustworthiness.
    - Demonstrate accountability to patients, society, and the profession, including the duty to act in response to the knowledge of professional behavior of others.
    - Attain milestones that indicate a commitment to excellence, as, for example, through ongoing professional development as evidence of a commitment to continuous learning.
  6. Practice-Based Learning and Improvement
    - Describe the clinical significance of and apply strategies for integrating research evidence into clinical practice.
    - Critically evaluate medical information and its sources and apply such information appropriately to decisions relating to patient care.
  7. Systems-Based Practice
    - Demonstrate understanding of how patient care and professional practices affect other health care professionals, health care organizations, and society.
    - Identify and utilize effective strategies for assessing patients.

## COLLEGE PROGRAM OBJECTIVES

In addition to the above course-specific goals and learning objectives, this clerkship rotation also facilitates student progress in attaining the College Program Objectives. Please refer to the complete list provided on the MSUCOM website (<https://com.msu.edu/>) and in the Student Handbook.

## REFERENCES

### REQUIRED STUDY RESOURCES

Desire 2 Learn (D2L): Please find online content for this course in D2L (<https://d2l.msu.edu/>). Once logged in with your MSU Net ID, your course will appear on the D2L landing page. If you do not see your course on the landing page, search for the course with the following criteria, and pin it to your homepage. **Core Internal Medical Sub-Internship**

If you encounter any issues accessing this D2L course, please email the CA (on the title page of this syllabus).

1. Access Medicine <https://accessmedicine-mhmedical-com.proxy2.cl.msu.edu/>

2. Harrison's Principles of Internal Medicine 20th edition

The bible of internal medicine. Long running book providing complex overview of topics that are applicable to every level of education. Can be overly complex when trying to quickly review a topic or answer clinical questions for a medical student.

Available at: <https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/>

3. Ashar, B., Miller R., Sisson S. The Johns Hopkins Internal Medicine Board Review. Philadelphia , Elsevier, 2012. ISBN:978-1-4557-0692-1

<http://site.ebrary.com.proxy1.cl.msu.edu/lib/michstate/detail.action?docID=10551169>

This is a strongly recommended text for all Internal Medicine rotations. It is available through the MSUlibrary at the link above or may be purchased by the individual student for a cost of \$99.95.

4. New England Journal of Medicine

Videos in clinical medicine

<http://www.nejm.org.proxy1.cl.msu.edu/multimedia/medical-videos>

## SUGGESTED STUDY RESOURCES

1. Additional Resources/Convenient Apps - some are free through the web and some you will need to pay for if you would like access. Also check with your hospital library as to whether they have any available electronically for your use.

○ Dynamed- <http://libguides.lib.msu.edu/dynamedapp>

○ UpToDate – <http://www.uptodate.com/home>

○ Epocrates - <https://online.epocrates.com/rxmain>

○ PreOpEval - <https://itunes.apple.com/us/app/preop-eval/id374154834?mt=8>

○ The Sanford Guide - <http://www.sanfordguide.com/>

○ ACP Doctors Doctor's Dilemma - <https://ddm.acponline.org/>

Accessing the Electronic Resources Using MSU's Library will provide many of these for free.  
<https://lib.msu.edu/>

2. Goldman's Cecil Medicine 26th ed

Complete overview of Internal medicine. May be a bit easier to follow than Harrison's.

Available at: <https://www-clinicalkey-com.proxy1.cl.msu.edu/#!/browse/book/3-s2.0-C20161036684>

3. Current Medical Diagnosis & Treatment 2021



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\*Concise overviews of topics as well as approach to patient's organized by system. The text focuses on practical application of knowledge and contains mixed media (videos, sound clips, etc.)

Available at: <https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/>

4. Symptom to Diagnosis: An Evidence-Based Guide, 4e

Cased based topics that walk a resident or medical student through the basic approach, differential diagnosis, and work up of various symptoms or clinical conditions.

Available at: <https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/book.aspx?bookID=2957>

5. Differential Diagnosis of Common Complaints, 7th Edition

Enhances differential diagnosis and approach to complaints.

Available at: <https://www-clinicalkey-com.proxy1.cl.msu.edu/#!/browse/book/3-s2.0-C20150022286>

6. Medical Secrets, 6th Edition

Bullet point and fact-based review by organ system.

Available at: <https://www-clinicalkey-com.proxy1.cl.msu.edu/#!/browse/book/3-s2.0-C20150066990>

7. Textbook of Physical Diagnosis, 8th Edition

Review of physical exam skills.

Available at: <https://www-clinicalkey-com.proxy1.cl.msu.edu/#!/browse/book/3-s2.0-C20180009366>

8. Dynamed Plus

Online bullet point review of assorted topics.

Available at: <https://lib.msu.edu/health/medicine/>

9. The 5-minute clinical consult 2020

Alphabetized, quick bullet point review of topics focused on application of medical knowledge

<https://oce-ovid-com.proxy1.cl.msu.edu/book?SerialCode=02148894>

10. BMJ Best Practices

Helpful resource with concise overviews of topics as well as various procedural videos.

Available at: <https://bestpractice-bmj-com.proxy1.cl.msu.edu/>

11. Board Vitals

Board question practice.

Available at: <https://libguides.lib.msu.edu/medicalboardexamprep/comlex>

12. Stat Pearls

<https://www.statpearls.com/>

Quick overviews of topics with associated medical questions.

13. Online Med Ed

<https://onlinemeded.org/?track=2>

Free lecture-based videos that are geared to improving board scores.

14. Merck Manuals

<https://www.merckmanuals.com/professional>

Contains quick concise overviews of topics as well as a large catalog of procedural videos.

**Helpful Review Journals** (Available through ClinicalKey database)

- American Journal of Medicine
- American Family Physician
- Critical Care Clinics
- Emergency Medicine Clinics of North America
- Hospital Medicine
- Lancet, The
- Medical Clinics of North America
- Medicine

## ROTATION REQUIREMENTS

REQUIRED	SUBMISSION METHOD	DUE DATE Please refer to D2L for actual (month/day) due dates
Required Module 1: Mechanical Ventilation Quiz	Taken in D2L	11:59 pm last day of the rotation.
Required Module 2: Sepsis Quiz	Taken in D2L	11:59 pm last day of the rotation.
Required Module 3: Shock Quiz	Taken in D2L	11:59 pm last day of the rotation.
Required Module 4: Tachyarrhythmias Quiz	Taken in D2L	11:59 pm last day of the rotation.
Required Module 5: Bradyarrhythmias Quiz	Taken in D2L	11:59 pm last day of the rotation.
Required Module 6: Hyperglycemic Crisis Quiz	Taken in D2L	11:59 pm last day of the rotation.

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REQUIRED	SUBMISSION METHOD	DUE DATE Please refer to D2L for actual (month/day) due dates
Required Module 7: GI Bleed Quiz	Taken in D2L	11:59 pm last day of the rotation.
Required Module 8: Ischemic Stroke Quiz	Taken in D2L	11:59 pm last day of the rotation.
Student Actual Daily Shift Schedule	Submitted into Dropbox in D2L	11:59 pm last day of the rotation.
Mid Rotation Evaluation	Submitted into Dropbox in D2L	11:59 pm on the third Wednesday of the Rotation
COMAT Exam	NBOME	Schedule for last Friday of IM660 per MSU COM instructions. However, successful completion will be tied to the IM 660 grade
Attend 1 Goal of Care Conference with patient/Family or POA	D2L Drop Box	11:59 pm on the last day of the Rotation
Attending Evaluation of Clerkship Student	Students must select their attending physician as directed within the rotation description in Medtrics. At the start of the last week of the rotation, students will need to request an evaluation in Medtrics. By requesting an attending evaluation from their assigned attending physician, the attending physician will receive an automated email link connecting them to their assigned Attending Evaluation within Medtrics. Attendings will be able to electronically access and submit the forms on behalf of their students.	Last Day of Rotation
Student Evaluation of Clerkship Rotation	Students will submit their rotation evaluations electronically at the conclusion of every rotation by accessing the Medtrics system: <a href="https://msucom.medtricslab.com/users/login/">https://msucom.medtricslab.com/users/login/</a> . By the last week of each rotation, students will receive an automated email link connecting them to their assigned evaluation. Students can also access pending evaluations on the 'Home' or 'Evaluations' tabs within their Medtrics accounts.	Last Day of Rotation

## HIGH PASS REQUIREMENTS\*

\* NOTE these are in addition to other requirements as listed including the COMAT score

OPTIONAL	SUBMISSION METHOD	DUE DATE Please refer to D2L for actual (month/day) due dates
<p>Select from the remaining modules listed and complete <b>two additional modules</b> of your choosing and their quizzes with an 80% grade on two attempts.</p> <p><b>Optional Modules:</b>                      Nosocomial Pneumonia                      Electrophysiology                      Thrombocytopenia                      Adrenal insufficiency                      Thyroid Disease                      Complications of Cirrhosis                      Seizure Disorder</p>	<p>Taken in D2L</p>	<p>11:59 pm last day of the rotation.</p>

## HONORS REQUIREMENTS

\* NOTE these are in addition to other requirements as listed including the COMAT score

OPTIONAL	SUBMISSION METHOD	DUE DATE Please refer to D2L for actual (month/day) due dates
<p>Select from the remaining modules listed and complete <b>four additional modules</b> of your choosing and their quizzes with an 80% grade on two attempts.</p> <p><b>Optional Modules:</b>                      Nosocomial Pneumonia                      Electrophysiology                      Thrombocytopenia                      Adrenal insufficiency                      Thyroid Disease                      Complications of Cirrhosis                      Seizure Disorder</p>	<p>Taken in D2L</p>	<p>11:59 pm last day of the rotation.</p>

### WEEKLY READINGS/OBJECTIVES/ASSIGNMENTS

Weekly modules are available on D2L with presentations, study resources, and weekly quizzes.

#### **Week 1**

## **Topics**

1. Mechanical ventilation
2. Nosocomial Pneumonia
3. Sepsis
4. Circulatory Shock

## **Specific Learning Objectives**

### **Mechanical Ventilation**

- Consistently recite the three main indications for mechanical ventilation
- Familiarize yourself with the various modes of ventilation.
- Provide initial ventilator settings (tidal volume, rate, etc.) for a newly intubated patient using assist control volume mode when asked.
- Suggest ventilator augmentation to correct disorders present on an arterial blood gas.
- Suggest basic troubleshooting for various ventilator alarms.
- Familiarize yourself with various ventilator strategies to combat specific disease states.
- Define ARDS when asked.
- Be able to assist in the decision of when a patient is ready to be weaned off a ventilator.

### **Nosocomial Pneumonia**

- Differentiate and define various nosocomial pneumonia (hospital acquired, & ventilator associated)
- Provide an oral explanation of how nosocomial pneumonia differs from community acquired based on bacterial spectrum.
- Provide a basic work up for pneumonia when encountered .
- Recite two antibiotics that cover nosocomial MRSA.
- Recite five antibiotics that cover Pseudomonas.
- Suggest an appropriate treatment regimen based on clinical presentation of nosocomial pneumonia.
- Provide suggestions to augmentation of therapy depending on patient's clinical response.

### **Sepsis**

- Consistently identify sepsis based on various physiological signs and laboratory findings.
- Provide an appropriate work up (labs, imaging, cultures) for a patient with sepsis.
- Provide appropriate antibiotic therapy based on site of infection.
- Provide appropriate fluid as support for septic patients as well as vasopressor support in patients with septic shock.
- Provide additional adjunctive support in septic patients (glucose control, corticosteroids, etc.)

### **Circulatory Shock**

- Consistently identify a patient that is in shock.
- Define the different forms of shock based on hemodynamic parameters.
- List 3-5 etiologies of each form of shock when asked.
- Use physical exam findings to narrow down type of shock.
- Apply pharmacology principles of various vasopressors and inotropes to the treatment of shock under different clinical situations.
- Provide basic treatment of different shock states.

## **Week two**

### **Topics**

1. Basics of Electrophysiology
2. Bradyarrhythmias
3. Tachyarrhythmias
4. Thrombocytopenia

### **Specific Learning Objectives**

#### **Basics of Electrophysiology**

- Review the action potential of the heart and apply this to mechanisms of arrhythmia.
- List three common mechanisms that lead to arrhythmia and which arrhythmia they may cause.
- When given an antiarrhythmic, classify it based on primary channel affects.
- Consistently recite antiarrhythmics potential effects on an EKG.
- List three side effects from commonly used antiarrhythmics.
- Do not worry about dosages of these medications until you are further along.

#### **Bradyarrhythmias**

- Consistently diagnose symptomatic bradycardia
- List five intrinsic causes of bradycardia
- List five extrinsic causes of bradycardia
- Review a medication list and discontinue any medication that may contribute to bradycardia.
- Recognize different form of sick sinus syndrome and EKG telemetry.
  - Sinus bradycardia, sinus pause, chronotropic incompetence, tachy-brady syndrome.
- Recognize Different form of AV node disease on EKG and telemetry.
  - 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> degree AV-block
- Provide ACLS treatment for unstable bradycardia.
- Familiarize yourself with transvenous and percutaneous pacemaker procedures.
- List three indications for permanent pacemaker placement

#### **Tachyarrhythmias**

- Consistently calculate rate and rhythm on telemetry or EKG
- Consistently identify the following arrhythmias on EKG or telemetry
  - Sinus tachycardia, supraventricular tachycardia, atrial fibrillation, atrial flutter, WPW, torsades de pointes, ventricular tachycardia, ventricular fibrillation
- List at least five causes that should be investigated when a patient has sinus tachycardia.
- Provide three examples of wide and narrow complex tachycardia.
- Suggest rate control medications under various clinical scenarios for atrial fibrillation or flutter.
- Decide if a patient would require anticoagulation for atrial fibrillation.
- Suggest basic treatment for WPW, ventricular tachycardia, ventricular fibrillation.

#### **Thrombocytopenia**

- Consistently recite the three main pathophysiological mechanisms of thrombocytopenia

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- List at least three causes of thrombocytopenia for each of the three pathophysiological mechanism
- Provide a basic work up for thrombocytopenia based on history and physical exam.
- Apply the indications for transfusion of platelets under various clinical conditions.
- Use peripheral smear findings to help identify etiology of thrombocytopenia.
- Distinguish various disorders associated with thrombocytopenia based on history, symptoms, laboratory evidence.
- Provide basic treatment for various thrombocytopenic disorders.
  - ITP, HIT, DIC and TTP

## **Week three**

### **Topics**

1. Adrenal Insufficiency
2. Hyperglycemic Crisis
3. Thyroid Disease

### **Specific Learning Objectives**

#### **Adrenal Insufficiency**

- List 3-6 causes of primary and central adrenal insufficiency
- List five clinical scenarios in which adrenal insufficiency should be on the differential diagnosis based on signs and symptoms of disease.
- Predict laboratory changes that are consistent with adrenal insufficiency on a basic metabolic panel.
- Recite the basic treatment for adrenal insufficiency and how it differs between primary and secondary disease.
- Interpret adrenal testing for insufficiency to predict likelihood of disease under different clinical situations.
- Consistently recognize and provide treatment for adrenal crisis.

#### **Hyperglycemic Crisis**

- Be able to explain the pathophysiology of hyperglycemic crisis and relate it to treatment.
- Consistently be able to provide a basic work up when hyperglycemic crisis is suspected based on signs and symptoms that would confirm your diagnosis.
- Consistently diagnose DKA/HSS using signs and symptoms as well as electrolytes
- List five causes precipitating causes of hyperglycemic crisis and provide a workup to identify each of those conditions.
- Quickly calculate an anion gap and understand pitfalls to calculation such as secondary metabolic alkalosis and pseudohyponatremia.
- Interpret laboratory findings to grade severity of illness in a patient with hyperglycemic crisis.
- Recite treatment goals and basic management of hyperglycemic crisis.

#### **Thyroid Disease**

- List five causes of primary hypothyroidism when asked.
- List three causes of central hypothyroidism when asked.
- Interpret thyroid studies to make the diagnosis for hypothyroidism and subclinical form.
- Discuss with a patient proper dosing/titration/administration of levothyroxine.

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- Recognize a patient with myxedema based on symptoms and physical exam findings.
- List five causes of primary hypothyroidism when asked.
- Provide a workup for a patient suspected having hyperthyroidism.
- Interpret thyroid studies to make the diagnosis for hyperthyroidism and subclinical form.
- Interpret radiological and laboratory testing to determine a cause of hyperthyroidism.
- Select treatment for hyperthyroidism based on workup and diagnosis.
- Recognize a patient for thyrotoxicosis based on symptoms and physical exam findings.
- Provide a treatment plan for a patient with thyroid storm.

## **Week four**

### **Topics**

1. Complications of Cirrhosis
2. Gastrointestinal Bleeding
3. Seizure Disorders
4. Ischemic Stroke

### **Specific Learning Objectives**

#### **Complications of Cirrhosis**

- Describe the basic pathophysiology that results in cirrhosis and relate it to the pathophysiology consequences of decompensated cirrhosis.
- List five causes of cirrhosis when asked.
- Consistently diagnose a patient with cirrhosis by physical exam (compensated and decompensated)
- Provide a workup to assist in diagnosis of cirrhosis.
- Familiarize yourself with risk stratifications scores for surgery of cirrhotic patients.
- List five complications of cirrhosis that might lead to hospitalization.
- Recite a treatment plan for variceal disease in acute/refractory hemorrhage and bleeding prevention.
- Recite the three main indications to undergo a paracentesis.
- Provide a differential diagnosis for ascites based on paracentesis results (SAAG)
- Provide stepwise therapy for ascites.
- Consistently diagnose spontaneous bacterial peritonitis based on peritoneal fluid results.
- Provide basis treatment for SBP and become familiar with indication for prophylaxis against SBP.
- Diagnose hepatic encephalopathy utilizing signs, symptoms and laboratory results knowing the limitations of relying on ammonia levels in relation to hepatic encephalopathy.
- Take a concise history to address possible precipitating causes of hepatic encephalopathy.
- Provide basic treatment for hepatic encephalopathy.
- When hepatorenal syndrome is being considered as cause for kidney injury in cirrhotic patient, be able to eliminate other causes in your workup.
- List three circumstances that can lead to hepatorenal syndrome and how to prevent it.
- List the treatment for hepatorenal syndrome when diagnosed.
- Be able to explain the signs and symptoms, workup and basic treatment of hepatopulmonary syndrome to a peer.

#### **Gastrointestinal Bleeding**

- Consistently use history and physical exam to predict location and etiology of gastrointestinal bleeding.



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- Recite at least five causes of upper GI bleed when asked.
- Recite at least five causes of lower GI bleed when asked.
- Provide an initial work up for GI bleeding including lab work and imaging.
- List the two most common causes of peptic ulcer disease as well as 3-5 other causes.
- Discussion options to evaluate obscure GI bleeds.

### **Seizure Disorders**

- Consistently explain the pathophysiology of seizure to a layperson
- List 5-10 causes of provoked seizures when asked.
- Define and identify different seizure types (e.g., partial complex)
- Consistently take a thorough history from a patient who has sustained a seizure, identifying any triggers that may have been present.
- Provide an appropriate work up for patient with new onset seizures.
- Recite which drugs have therapeutic levels that can be drawn and resulted quickly in most standard hospital labs.
- Define status epilepticus when asked.
- Familiarize yourself with complications of anti-epileptic medications.
- Provide basic abortive anti-epileptic treatment and suggest advanced treatment to a patient with status epilepticus.

### **Ischemic Stroke**

- Consistently describe the pathology of stroke to a layperson.
- List 3-5 risk factors for both embolic and thrombotic ischemic stroke when asked.
- List five conditions that can mimic stroke when asked.
- After examining a patient with a stroke be able to make a reasonable guess as to which cerebral artery or area of circulation is involved
- Identify a stroke patient that may be a candidate for tPA.
- Review/recite blood pressure goals for a stroke patient under various clinical circumstances (tPA vs no tPA)
- Provide a sensible and/cost effective work up for secondary prevention of stroke.
- Provide appropriate medical therapy for secondary prevention of stroke based on workup.

### **MID ROTATION FEEDBACK FORM**

Students are required to complete the MSU COM Mid-Rotation Feedback Form. This will need to be completed by an Attending or Resident at the end of week two of the rotation. It should be dated no later than the 3rd Wednesday of the rotation. Students must upload the form to a D2L drop box by 11:59 pm on the last day of the clerkship to be eligible to receive Honors or obtain a High Pass in the rotation. A grade cannot be entered for the course until all requirements of the course have been met. If you are unable to complete the Mid-Rotation Feedback, it will be your responsibility to reach out to the Course Coordinator for the assigned Corrective Action, see page 16.

### **FAMILY CONFERENCE LOG**

Students are required to complete Family Conference Log Form. Students must upload the form to a D2L drop box by 11:59 pm on the last day of the clerkship to be eligible to receive Honors or obtain a High Pass in the rotation. A grade cannot be entered for the course until all requirements of the course have been met. If you are unable to complete the Family Conference Log, it will be your responsibility to reach out to the Course Coordinator for the assigned Corrective Action, see page 16.

## **COMAT EXAM INFORMATION**

All students are required to take the NBOME COMAT examination in Internal Medicine on the last Friday of IM 660. The score for the exam will be considered part of the IM 660 rotation grade and for honors designations in all IM core rotations.

If this deadline is not met, the student will be required to reschedule this exam later. Students will need to contact the Course Assistant, Katie Gibson-Stofflet:

1. By the end of the first week of the rotation if there is a conflict regarding taking the exam on the last Friday of the rotation, or
2. Within 24 hours of an emergency that will keep the student from taking the exam the last Friday of the rotation. Course faculty will consider each case and determine if a delay in the exam will be permitted. Should a student be granted a delay in examination or early testing approval, the Department will send written approval and notification of the required reschedule date to the COM Clerkship Office.

It is your responsibility to take the exam the last Friday of the rotation at the time and location you have registered for. If this deadline is not met (with the exclusion of the above two scenarios) you will receive an "0" for that attempt of the exam and will only be given one (1) time to take and pass the COMAT the next time the exam is offered or will receive an "N" grade for the rotation

Students must score a minimum of 83 on the exam that you take to receive a passing grade. Each student will be allowed to take the exam two times before receiving an "N" grade for the rotation. When a student must sit for a re-take of the exam, they will be contacted by the Course Assistant, who will provide the student with a deadline by which they must sit for the re-take, as well as the consequence for failure to do so. If a student receives an "N" grade for the rotation, s/he will be notified of the failure by the department.

For information on exam registration and administration, please visit the COM Clerkship Student Portal: <https://michiganstate.sharepoint.com/sites/StudentClerkship>

If a student requires an accommodation, a valid VISA from the Resource Center for Persons with Disabilities (RCPD) must be presented to the COM Clerkship Team at least seven days in advance of the COMAT examination date.

**DUE DATE: The last Friday of the second or third IM Rotation**

## **ROTATION EVALUATIONS**

### **Attending Evaluation of Student**

Attending Evaluation of the Student is completed electronically via Medtrics by the supervisor designated within the Medtrics rotation description. To initiate this evaluation, each student must select their attending physician as directed within the rotation description in Medtrics. Students will receive an email from Medtrics to select the attending 7 days prior to the end of the rotation. Should your rotation lack a rotation description or if you have any questions, please contact com.msu.edu. Upon selecting the attending physician directed within the Medtrics rotation description, the attending physician will receive an automated email link connecting them to their assigned Attending Evaluation within Medtrics.

Attendings will be able to electronically access and submit the Attending Evaluation of the Student. Attendings will access the electronic form within Medtrics by selecting the email link on a smart device. No login (username/password) will be required for attendings to access their pending evaluation(s)

assigned to them. After the electronic form has been submitted by their attending, students can review the Attending Evaluation of the Student that were completed by visiting the 'Evaluations' module (in the 'About Me' tab) of their Medtrics profiles.

Students are encouraged to seek formative/verbal feedback on their performance at least weekly. Students are also encouraged to discuss the Attending Evaluation of the Student with the supervisor completing the evaluation.

Any evidence of tampering or modification while in the possession of the student will be considered "unprofessional behavior" and will be referred to the Committee on Student Evaluation (COSE).

Grades are held until all rotation requirements are received. Students are required to ensure their rotation requirements are completed correctly.

#### Student Evaluation of Clerkship Rotation

Students will submit their rotation evaluations electronically at the conclusion of every rotation by accessing the Medtrics system: <https://msucom.medtricslab.com/users/login/>. By the last week of each rotation, students will receive an automated email link connecting them to their assigned evaluation for the respective rotation. Students can also access their pending evaluations on the 'Home' or 'Evaluations' tabs within their Medtrics accounts.

#### Unsatisfactory Clinical Performance

The Instructor of Record will review/investigate a student's performance on a rotation when a concern is raised by the supervisor(s), and/or when the Attending Evaluation of Clerkship Student contains any below expectation marks within the professionalism area, any unsatisfactory written comments, or a total of two or more below average marks on the evaluation. After investigations, the Instructor of Record will determine a final grade for the student.

Professionalism concerns, as well as accolades, will also be referred to the MSUCOM Spartan Committee Clearinghouse for resolution, per MSUCOM's Common Ground Framework for Professional Conduct.

### CORRECTIVE ACTION

If a student does not successfully complete the rotation requirements of the course, the student will receive an NGR grade and be permitted to go through a 'corrective action' process.

The following assignments are eligible for corrective action and will be due no later than 14 days after the last day of the rotation at 11:59pm:

#### 1. Weekly Quizzes

The student who fails to achieve an 80% on each require module with two attempts will either be allowed to have a third attempt or take a comprehensive final examination that will be a random selection of related questions, worth 50 points, with a necessary score of 80% to pass. It will be a cumulative examination and will be offered within the first two weeks following the completion of the rotation in which the student failed to achieve the necessary average score. The Instructor of Record will advise what option you will be given based on their review of your attempts. This will be comprised of questions from each of the eight required modules.

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### 2. Mid Rotation Evaluation

Students that do not successfully complete and upload their mid rotation evaluation by 11:59 pm the last day (Sunday) of the rotation will be required to email the Course Coordinator with an explanation why this was missed.

The Course Assistant will contact the Instructor of Record and they will assign the required Corrective Action. Corrective Action may take one of a variety of different formats, and the instructions will be outlined in the email from the Course Assistant with details and deadlines.

### 3. Family Conference Log

The student who fails to turn in required paperwork, who has a verifiable reason they failed to do so, will be allowed 14 days to submit, or more depending on the circumstances. Failure to meet this two-week deadline will result in an N grade.

### 4. Evaluations

The student who fails to turn in required paperwork, who has a verifiable reason they failed to do so, will be allowed 14 days to submit, or more depending on the circumstances. Failure to meet this two-week deadline will result in an N grade.

### 5. COMAT

The student must complete the COMAT exam at the next available scheduled time after completion of the second or third IM rotation. If this is not IM 660 then the grade for IM 660 will remain NGR until the final rotation is completed and the exam is taken.

The student is responsible for contacting the Course Assistant (on the title page of this syllabus) if they believe missing assignments were reported in error, or if they are unclear about the corrective action process.

While it is the responsibility of the student to ensure that the Attending Evaluation of Clerkship Student is completed, this requirement may extend beyond the corrective action deadline. Additionally, in the event of a failing score earned on the student's first attempt of a COMAT subject exam, the corrective action for the COMAT retake may extend beyond 14 days.

If a student **successfully completes** the corrective action process, as determined by the IOR, the student will receive credit for the deficient academic grading requirement(s) and be eligible for a change in rotation grade (from NGR to Pass, pending the Attending Evaluation of Clerkship Student and, if applicable, score on his/her COMAT retake).

As determined by the IOR, the student will receive an N grade for the course if all assignments and the corrective action process are **not completed** successfully within 14 days after the last day of rotation at 11:59pm (with the exception of the Attending Evaluation). Additionally, a letter of unprofessional behavior for late submission of assignments will be sent to the MSUCOM Spartan Community Clearinghouse.

## BASE HOSPITAL REQUIREMENTS

Students are responsible for completing all additional requirements set by the hospital/clinical site at which they are completing a rotation. Students are not responsible for reporting to MSUCOM the results of any requirements that exist outside of those listed above.

## **STUDENT RESPONSIBILITIES AND EXPECTATIONS**

The internal medicine clerkship is divided into three four-week rotations that include an IM- Hospital, IM- Outpatient or Family Medicine (FM622) and IM-Sub-Internship clerkship. This will provide the mechanism to achieve the objectives that will be covered in internal medicine.

During the late third or fourth year, sub-I students will rotate as a part of the medical team at their designated hospital. The students will collaborate primarily with the preceptor and with intern/resident physicians when applicable as part of the team caring for patients. Students will be expected to write history and physicals on new admits and daily progress notes.

Medical students are expected to participate in direct patient care on the hospital floors, although final responsibility and decision-making rests with the attending physician. As a fourth year sub-I medical student more emphasis will be placed on student responsibility and your ability to manage complicated internal medicine patients. Students are required to attend daily didactics that may include morning report, noon conference, faculty grand rounds, resident grand rounds, hematology rounds, cardiology rounds and faculty lectures.

During your clinical rotation you will be part of many different learning environments and will be given a great deal of responsibility. Importantly, most of your patients will consider you a critical member of the medical team and see you as a physician. Given this, it is vital that a high-level professional behavior is maintained. Outward appearance is particularly important in this regard and is critical for initial impressions and for gaining the respect of your patients.

Scrubs are provided for situations where extended periods of patient care necessitate more comfortable clothing or a change in clothing. Therefore, scrubs are allowed for on-call days only.

At ALL times when patient contact is expected or anticipated, your waist-length WHITE COAT should be worn, with your ID badge worn above the waist.

Students are expected to function collaboratively on health care teams that include health professionals from other disciplines in the provision of quality, patient-centered care.

Students are expected to identify, access, interpret and apply medical evidence contained in the scientific literature related to patients' health problems.

Students are expected to: assess their personal learning needs specific to this clinical rotation, engage in deliberate, independent learning activities to address their gaps in knowledge, skills or attitudes; and solicit feedback and use it on a daily basis to continuously improve their clinical practice.

### **ATTIRE AND ETIQUETTE**

During your clinical rotation, you will be a part of many different learning environments and will be given great deal of responsibility. Importantly, most of your patients will consider you a critical member of the medical team and see you as a physician. Given this, it is vital that a high level of professional behavior is maintained. Outward appearance is particularly important in this regard and is critical for initial

impressions and for gaining the respect of your patients. For this reason, please adhere to the following dress code during your clerkship:

- Men should routinely dress in slacks, as well as a shirt and tie. No blue jeans are allowed during any rotation.
- Women should wear skirt or slacks. Skirts should be of a length that reaches the knees or longer.
- Tennis shoes should not be worn, except with scrubs.
- No open toe shoes, flip-flops, or sandals are allowed at any time. Socks are a public health code requirement at all times.
- Scrubs are provided for situations where extended periods of patient care necessitate more comfortable clothing or change in clothing. Therefore, scrubs are allowed for 'on-call days' only.
- At ALL times when patient contact is expected or anticipated, your waist-length WHITE COAT will be worn, with your ID badge worn above the waist.
- As this policy simply represents general guidelines, we encourage anyone with uncertainties or questions regarding the dress code to reach out to student director for confirmation.
- Wear a waterproof gown when blood or body fluid may soak a cloth gown.

## MSU COLLEGE OF OSTEOPATHIC MEDICINE STANDARD POLICIES

The following are standard MSUCOM policies across all Clerkship rotations.

### CLERKSHIP ATTENDANCE POLICY

MSUCOM requires student participation in clerkship rotations and clinical activities with consistent attendance to acquire the skills and knowledge that are necessary for successful program completion. Students are expected to take minimal time off outside of vacation periods built into student schedules and should only request additional time off in the rare events and circumstances outlined below.

Specific courses may have additional absence requirements from this general clerkship policy, and it is the student's responsibility to adhere to those requirements according to the respective course syllabus.

#### Excused Absences

Students must obtain documented approval for any full- or partial-day absence on a rotation. **Excused absences** require the completion of the *Clerkship Program Excused Absence Request Form* by taking the following steps:

- Obtain appropriate signatures on the *Clerkship Program Excused Absence Request Form* at least 30 days prior to the date of the absence. An absence due to a sudden emergency is the exception to the 30-day advanced notice rule.
- Upload the completed *Clerkship Program Excused Absence Request Form* to the 'Excused Absences' folder (within the 'My Personal Documents' section) of a student's Medtrics profile.

**Unexcused absences** are full- or partial-day absences taken without the proper completion of the *Clerkship Program Excused Absence Request Form*, or any absences not covered in the Clerkship Attendance Policy. Unexcused absences are considered unprofessional and will result in a report to the Spartan Community Clearing House and/or the MSUCOM Committee on Student Evaluation (COSE). Unexcused absences may also have a negative impact on a student's rotation grade or evaluation.

**Students are not allowed to be absent from the first day of any rotation.**

- Due to the onboarding plans at most rotation sites, students must attend the first day of every rotation. Students must plan accordingly for personal days, interview days, COMLEX, etc.

**Maximum time off any rotation\***

<b>Length of Rotation</b>	<b>Maximum Number of Days Off</b>	
<b>4 weeks</b>	<b>2 days</b>	Should an absence exceed these limits, the student is responsible for requesting additional days off from the Associate Dean for Clerkship Education via email ( <a href="mailto:COM.Clerkship@msu.edu">COM.Clerkship@msu.edu</a> ) prior to the absence.
<b>2 weeks</b>	<b>0 days</b>	

*\*Exception: A fourth-year student may be absent a total of 4 days on any 4-week rotation or 2 days on any 2-week rotation during the months of October-January for interview purposes only. If interview absences exceed these totals, the student must submit a Clerkship Program Excused Absence Request Form (with appropriate signatures obtained from the rotation attending and rotation site) to the Associate Dean for Clerkship Education via email ([COM.Clerkship@msu.edu](mailto:COM.Clerkship@msu.edu)) prior to the absence.*

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Absence Type	Qualifications	Maximum Number of Days Off	Details	Required Approval from Associate Dean for Clerkship Education
Personal Day	May be used at the discretion of the student (example: illness, physician appt., conference time, etc.). <u>Total</u> days off any one rotation (including personal days off) cannot exceed two on any one 4-week rotation.	Five total days per academic year (July-June)	While personal days may be used at the discretion of the student, the <u>total</u> days off any one rotation (including personal days off) cannot exceed two on any one 4-week rotation, i.e., students cannot use all 5 days on one rotation.	No
Jury Duty	Court documentation must accompany the <i>Clerkship Program Absence Request Form</i>	N/A	Jury duty, when obligated, is not considered a personal day absence.	Yes
Hospital-organized community events	Example: Special Olympic Physicals	N/A	These events would be considered part of the rotation and not a personal day absence.	No
Examination	COMLEX USA Level 2 CE/USMLE Step 2 CK/Canadian MCCEE	1 day		No
	COMAT/NBME shelf examinations	Students have the time off to take the examination only	Students should be reporting to rotation before/after examination.	No
Prolonged Illness, Bereavement, Maternity Leave	Medical related absence or bereavement	Determined on a case-by-case basis	Students must contact the Associate Dean for Clerkship Education directly ( <a href="mailto:enright4@msu.edu">enright4@msu.edu</a> ) to discuss time off rotations.	Yes

**Clerkship Program Excused Absence Request Forms:** Once appropriate approval signatures are obtained, forms must be uploaded to the 'Excused Absences' folder within each student's Medtrics profile. Students should maintain a copy for their records. Students missing 2 days or less of a 4week rotation must first use their personal days for the rotation. Time missed beyond that will be assigned online curriculum to be completed.



## POLICY FOR MEDICAL STUDENT SUPERVISION

### Supervisors of the Medical Students in the Clinical Setting

The MSUCOM curriculum includes required clinical experiences in a variety of clinical learning environments. The role of the student is to participate in patient care in ways that are appropriate for the student's level of training and experience and to the clinical situation. The student's clinical activities will be under the supervision of licensed physicians. This supervising physician may delegate the supervision of the medical student to a resident, fellow, or other qualified healthcare provider; however, the supervising physician retains full responsibility for the supervision of the medical students assigned to the clinical rotation and must ensure his/her designee(s) are prepared for their roles for supervision of medical students.

The physician supervisor and his/her designee(s) must be members in good standing in their facilities. They must have a license appropriate to his/her specialty of practice and be supervising the medical student within that scope of practice as delineated by the credentialing body of the facility.

### Level of Supervision/Responsibilities

Clinical supervision is designed to foster progressive responsibility as a student progresses through the curriculum, with the supervising physicians providing the medical student opportunity to demonstrate progressive involvement in patient care. MSUCOM students will be expected to follow clinical policies of the facility regarding medical records and clinical care. Medical student participation in patient history/physical exam, critical data analysis, management, and procedures will include, but are not limited to, factors such as:

- The student's demonstrated ability
- The student's level of education and experience
- The learning objectives of the clinical experience

First- and second-year medical students will be directly supervised at all times (supervising physician or designee present or immediately available).

Third- and fourth-year medical students will be supervised at a level appropriate to the clinical situation and that student's level of experience. For some tasks, indirect supervision may be appropriate for some students. Direct supervision would be appropriate for advanced procedures.

Supervising physicians will provide medical students with timely and specific feedback on performance. The supervising physician will complete a mid-rotation evaluative discussion with the medical student. Supervising physicians will complete a summative evaluation and are encouraged to contact the course/clerkship director with any gaps in student performance.

Medical students with any concern regarding clinical, administrative, and educational or safety issues during his/her rotation will be encouraged to contact the supervising physician or clerkship/course director.

### MSUCOM STUDENT HANDBOOK

The Student Handbook is published electronically by MSUCOM for students in the Doctor of Osteopathic Medicine program. This handbook does not supersede other Michigan State University or College of Osteopathic Medicine policies, regulations, agreements, or guidelines. The Handbook is updated annually during the summer semester, with changes effective when posted. Any subsequent changes are effective as of the date of issuance.

Students shall adhere to Michigan State University and College of Osteopathic Medicine policies, procedures, agreements, and guidelines. Violations of any regulation are subject to disciplinary action, up to and including program dismissal.

### COMMON GROUND FRAMEWORK FOR PROFESSIONAL CONDUCT

The Common Ground Framework provides the MSUCOM community with a reminder of the unity of mind, body, and spirit that underlines the field of osteopathic medicine. The framework is a set of guiding, foundational principles that underpin professional conduct and integrity and applies to all professionals at work within the shared college community, independent of their specific roles or responsibilities.

This framework is built around the acronym CORE, representing Collaboration, Opportunity, Responsibility, and Expertise. Each domain encompasses values and examples of how they are demonstrated.

- **Collaboration:** Working together with others
  - Interactive: Interact effectively and respectfully with people you encounter; demonstrate honesty, genuineness, humility, and compassion
  - Dynamics and Communication: Demonstrate respect, civility, and courtesy in communication; communicate effectively with diverse individuals and groups for a variety of purposes using available technologies; employ active listening.
  - Use of Feedback: Identify sources of feedback; deliver and receive effective feedback for initiatives, evaluations and assessments, quality improvements, conflict resolution, and peer review.
- **Opportunity:** Encouraging an environment of mutual support
  - Shared Leadership: Exhibit advocacy for self and others; accept situational leadership as needed; establish mutual support and respect; participate as a support for others regardless of title or position.
  - Problem-solving: Recognize and define problems; analyze data; implement solutions; evaluate outcomes; include the perspectives of others
  - Decision-making: Fulfill commitments; be accountable for actions and outcomes; discuss and contribute your perspective in group settings; listen to multiple viewpoints prior to making a decision

- **Responsibility:** Supporting a shared culture of accountability
  - Effective Use of Time and Resources: Invest time, energy, and material resources efficiently in order to provide effective services; demonstrate integrity and stewardship of resources.
  - Critical Thinking Skills: Recognize and differentiate facts, illusions, and assumptions; question logically; identify gaps in information and knowledge.
  - Mindfulness and Self-Care: Actively engage in surrounding circumstances and activities; self-assess, self-correct, and self-direct; identify sources of stress and develop effective coping behaviors.
- **Expertise:** Having relevant skills or knowledge
  - Core of Knowledge: Develop core professional knowledge; apply the knowledge in clinical, academic, and administrative settings.
  - Technical Skills: Show competency and proficiency in performing tasks that are integral to the scope and practice of your profession; identify needs and resources for learning; continually see new knowledge and understanding in your profession.

### MEDICAL STUDENT RIGHTS AND RESPONSIBILITIES

The rights and responsibilities of students enrolled in MSUCOM are defined by the medical colleges of Michigan State University, including the College of Osteopathic Medicine, the College of Human Medicine, and the College of Veterinary Medicine. Students enrolled in the professional curricula of these colleges are identified as “medical students.” These colleges collectively define “Medical Student Rights and Responsibilities” (MSRR). This document addresses academic rights and responsibilities, governance, procedures for complaints, due process, and other topics. The current version is available on the MSU Spartan Life website at the address below: <http://splife.studentlife.msu.edu/medical-student-rights-and-responsibilities-mssr>

### MSU EMAIL

To facilitate communication from faculty and staff to students, students are required to have a functioning MSU email address. Students are responsible for checking their MSU email accounts daily and maintaining their MSU mailboxes so that messages can be received.

Forwarding MSU email to another email account or failure to check email are not valid excuses for missing a deadline or other requirements of the clinical education program.

Further, students must use secure email when working in a hospital, clinic, or other health care setting if discussion of patient information is involved. MSUNet (msu.edu) email is secure; many web-based email systems including Hotmail, Gmail, and Yahoo are not.

### COURSE GRADES

**H/Honors** – A grade of honors will be designated to students demonstrating outstanding clinical, professional, and academic performance in certain core rotations. Criteria for achieving honors in a core rotation will be determined by the Instructor of Record and will be listed in the course syllabus. While Honors designation will be awarded to

students meeting the criteria in the syllabi of the above courses, Honors is not an official MSU grade. The official MSUCOM transcript will reflect a grade as Pass with an additional notation that the student achieved Honors in the course. The students Medical Student Performance Evaluation will reflect each Honors grade.

**HP/High Pass** – The grade of High Pass will be designated to students who have above average clinical, professional, and academic performance in certain core rotations but do not meet the criteria for Honors. Criteria for High Pass in a core rotation will be determined by the Instructor of Record and will be listed in the course syllabus. While High Pass designation will be awarded to students meeting the criteria in the syllabi of the above courses, High Pass is not an official MSU grade. The official MSUCOM transcript will reflect a grade as Pass with an additional notation that the student achieved High Pass in the course. The student's Medical Student Performance Evaluation will reflect each High Pass grade.

**P/Pass** – means that credit is granted, and that the student achieved a level of performance judged to be satisfactory by the department according to the student's didactic and clinical performance.

**NGR/No Grade Reported** – means that a final grade ('Pass' or 'No Grade') cannot be determined due to one or more missing course requirements. The NGR will be changed to a final grade once all the completed course requirements have been submitted to and processed by MSUCOM (either to the department or Clerkship Team). An 'NGR' grade will NOT remain on a student's transcript.

**N/No Grade** – means that no credit is granted, and that the student did not achieve a level of performance judged to be satisfactory by the department according to the student's didactic and clinical performance.

#### N Grade Policy

Students who fail this rotation will have to repeat the entire rotation and fulfill all (clinical and academic) requirements.

#### STUDENT EXPOSURE PROCEDURE

A form has been developed by the University Physician to report incidents of exposure, e.g. needle sticks, mucous membrane exposure, tuberculosis exposure, etc., and it may be found on the Clerkship Medical Education page of the MSUCOM website [here](https://com.msu.edu/current-students/clerkship-medical-education) (<https://com.msu.edu/current-students/clerkship-medical-education>).

Contact Associate Dean for Clerkship Education, Dr. Susan Enright ([enright4@msu.edu](mailto:enright4@msu.edu)), if exposure incident occurs.

#### STUDENT VISA

Michigan State University is committed to providing equal opportunity for participation in all programs, services, and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities

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(RCPD) at 517-884-RCPD, or on the web at [www.rcpd.msu.edu](http://www.rcpd.msu.edu). Once a student's eligibility for (clinical and/or testing) accommodation(s) are determined, the student may be issued a **Verified Individualized Services and Accommodations** (VISA) form. Students must present their VISA forms to the Clerkship Team ([COM.Clerkship@msu.edu](mailto:COM.Clerkship@msu.edu)) at the start of the semester in which they intend to use their accommodations (for tests, projects, labs, etc.). Accommodation requests received after the semester onset will be honored whenever possible.

If modifications, updates, or extensions to an existing VISA form are made after the semester begins, it is the responsibility of the student to submit the newest version to the Clerkship Team if he/she intends to utilize the accommodation going forward.

### SUMMARY OF GRADING REQUIREMENTS

Requirement	Submission Method	Honors Designation	High Pass	Pass	No Grade Reported	No Pass
<b>View the modules online. Take the required eight core Module Quizzes by end of the rotation</b>	Completed in D2L.	All quizzes have been completed by 11:59 pm the last day of the Rotation with an 80% score on each module within two attempts plus four additional optional modules besides the eight required modules.	All quizzes have been completed by 11:59 pm the last day of the Rotation with an 80% score on each module within two attempts plus two additional optional modules besides the eight required modules.	All quizzes have been completed at the end of each week and finalized and completed by 11:59 pm the last day of the Rotation with an 80% on each module.	Will be the conditional grade until all requirements of this rotation are met.	Failure to meet the quiz and or the corrective action.
<b>Family Conference Log</b>	Submitted into Dropbox in D2L	Completed 100% and uploaded by 11:59 pm the last day of the rotation.	Completed 100% and uploaded by 11:59 pm the last day of the rotation.	Completed 100% and uploaded by 11:59 pm the last day of the rotation.	Will be the conditional grade until all requirements of this rotation are met.	Failure to complete and upload within 14 days from the end of the rotation.
<b>Mid Rotation Evaluation</b>	Submitted into Dropbox in D2L	Completed 100% and uploaded by 11:59 pm on the third Wednesday of the Rotation.	Completed 100% and uploaded by 11:59 pm the last day of the rotation.	Completed 100% and uploaded by 11:59 pm the last day of the rotation.	Will be the conditional grade until all requirements of this rotation are met.	Failure to complete and upload within 14 days from the end of the rotation.
<b>COMAT Exam</b>	NBOME	Score at or above 110 on first attempt.	Score of 102 to 109 on first attempt.	Score an eighty-three or above the day you take the exam. If you fail to take your exam the last Friday of the Rotation, you will receive a zero and have one chance to retake the exam.	Will be the conditional grade until all requirements of this rotation are met.	<ul style="list-style-type: none"> <li>• Failure to pass the exam with two attempts.</li> <li>• Failure to take the retake in the time given.</li> <li>• Failure to take the exam the first time offered and not pass the exam on your second (due to the first attempt being a zero) attempt.</li> </ul>

Requirement	Submission Method	Honors Designation	High Pass	Pass	No Grade Reported	No Pass
<b>Shift Schedule</b>	Completed 100% and uploaded by 11:59pm the last day of the rotation in D2L. You must upload the schedule you worked. There is no standard form, and you can just upload the four-week calendar marking the shifts you worked.	Completed 100% and uploaded by 11:59 pm the last day of the rotation. You must upload the schedule you worked. There is no standard form, and you can just upload the four-week calendar marking the shifts you worked.	Completed 100% and uploaded by 11:59 pm the last day of the rotation. You must upload the schedule you worked. There is no standard form, and you can just upload the four-week calendar marking the shifts you worked.	Completed 100% and uploaded by 11:59 pm the last day of the rotation. You must upload the schedule you worked. There is no standard form, and you can just upload the four-week calendar marking the shifts you worked.	Will be the conditional grade until all requirements of this rotation are met.	Failure to complete and upload within 14 days from the end of the rotation.
<b>Attending Evaluation of Clerkship Student</b>	Attendings receive an automated email link connecting them to their assigned evaluation(s) within Medtrics, where they may access and submit the electronic form(s) directly	<ul style="list-style-type: none"> <li>• Receives no “Below Expectations.”</li> <li>• Receives no comments indicating below expectations of performance</li> </ul>	<ul style="list-style-type: none"> <li>• Receives no “Below Expectations.”</li> <li>• Receives no comments indicating below expectations of performance</li> </ul>	<ul style="list-style-type: none"> <li>• Student may receive “Below Expectations” in up to one (1) subcategory.</li> <li>• Overall categories must receive “Meets Expectations” or “Exceeds Expectations”</li> </ul>	Will be the conditional grade until all requirements of this rotation are met	<ul style="list-style-type: none"> <li>• Receives two (2) or more “Below Expectations” within the subcategory sections.</li> <li>• Receives comments that indicate below expectations of performance.</li> <li>• See Unsatisfactory Clinical Performance above</li> </ul>
<b>Student Evaluation of Clerkship Rotation</b>	Can be accessed and submitted electronically by students within the dashboard of their Medtrics profiles	Completed 100% and uploaded by 11:59pm the last day of the rotation	Completed 100% and uploaded by 11:59 pm the last day of the rotation.	Completed 100% and uploaded by 11:59 pm the last day of the rotation.	Will be the conditional grade until all requirements of this rotation are met.	Failure to complete and upload within 14 days from the end of the rotation.

Student Name \_\_\_\_\_

**IM660 FAMILY CONFERENCE LOG**

Date of family conference \_\_\_\_\_

1. **Patients reason for being in ICU** \_\_\_\_\_  
\_\_\_\_\_

2. **Patient age and Gender** \_\_\_\_\_

3. **Who participated in this conference – Check all that apply**

- a. Family or DPOA \_\_\_\_\_
- b. Patient \_\_\_\_\_
- c. Attending \_\_\_\_\_
- d. Resident \_\_\_\_\_
- e. Social Worker \_\_\_\_\_
- f. Case Manager \_\_\_\_\_
- g. Patients Nurse \_\_\_\_\_
- h. Pharmacist \_\_\_\_\_
- i. Pastoral care or other religious support \_\_\_\_\_
- j. You \_\_\_\_\_
- k. Other interprofessional students \_\_\_\_\_

4. **Purpose of the meeting:**

- a. Establish goals of care \_\_\_\_\_
- b. Discuss termination of care \_\_\_\_\_
- c. Discuss Palliative Care or Hospice \_\_\_\_\_
- d. Establish brain death \_\_\_\_\_
- e. Discuss organ donation \_\_\_\_\_

5. Final result of the meeting in your own words: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Do you feel that everyone's voice was heard? \_\_\_\_\_ Yes \_\_\_\_\_ No  
Why or why not? \_\_\_\_\_  
\_\_\_\_\_

7. Was this a difficult process for you to participate in? \_\_\_\_\_ Yes \_\_\_\_\_ No  
In what way? \_\_\_\_\_  
\_\_\_\_\_



## APPENDIX



College of Osteopathic Medicine  
MICHIGAN STATE UNIVERSITY

### MID-ROTATION FEEDBACK FORM

Student Name: \_\_\_\_\_

Evaluator Name: \_\_\_\_\_

Evaluator Signature: \_\_\_\_\_

Date of review with Student: \_\_\_\_\_

1. This assessment is based on:

- My own observations and interactions with the student.  
 Feedback received from other faculty and/or resident supervisors.

2. The student is progressing satisfactorily for their level of training:

- YES                       NO

If NO, please summarize areas needing improvement below:

3. Overall comments on student performance

Strengths:	Areas of Improvement:

4. Professionalism expectations are listed below. Please check only areas of student **DIFFICULTY**:

On time for all activities of the rotation	Present/Prepared for all activities of rotation
Respectful/courteous to patients, staff, peers, attending's	Student is aware of limitations and appropriately seeks assistance when needed
A great team player (helpful, reliable, proactive)	Accepting of feedback and made necessary changes because of the feedback
Engaged in learning	Honest and trustworthy
A good patient advocate	Work ethic