IM 650
CORE INTERNAL MEDICINE INPATIENT CLERKSHIP
REQUIRED ROTATION (R2) SYLLABUS

Osteopathic Medical Specialties
Mary Hughes, DO
Chairperson, Instructor of Record
hughesm@msu.edu

David Minter, DO
Faculty Editor and Content Expert
minterda@msu.edu

EFFECTIVE AUGUST 2, 2021 TO JULY 31, 2022

For questions about content or administrative aspects of this course, please contact:

Stephen Stone
COURSE ASSISTANT (CA)
stonest@msu.edu

Katie Gibson-Stofflet
COURSE ASSISTANT (CA)
katiegs@msu.edu

At 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.
# TABLE OF CONTENTS

INTRODUCTION AND OVERVIEW ................................................................. 2
  ROTATION FORMAT ................................................................. 2

GOALS AND OBJECTIVES ................................................................. 2
  GOALS ................................................................. 2
  OBJECTIVES ................................................................. 4
  CORE COMPETENCIES ................................................................. 4

COLLEGE PROGRAM OBJECTIVES ................................................................. 6

REFERENCES ................................................................. 6
  REQUIRED STUDY RESOURCES ................................................................. 6
  SUGGESTED STUDY RESOURCES ................................................................. 7

ROTATION REQUIREMENTS ................................................................. 8
  WEEKLY READINGS/OBJECTIVES/ASSIGNMENTS ................................................................. 9
  Transitions of Care Modules ................................................................. 9
  Harrison’s Question Bank Quiz ................................................................. 10
  Weekly Modules and Quizzes ................................................................. 10
    Week 1 ................................................................. 10
    Week 2 ................................................................. 11
    Week 3 ................................................................. 12
    Week 4 ................................................................. 14
  COMAT EXAM INFORMATION ................................................................. 15
  ROTATION EVALUATIONS ................................................................. 16
    Attending Evaluation of Student ................................................................. 16
    Student Evaluation of Clerkship Rotation ................................................................. 16
    Unsatisfactory Clinical Performance ................................................................. 16
  CORRECTIVE ACTION PROCESS ................................................................. 16
  BASE HOSPITAL REQUIREMENTS ................................................................. 17

STUDENT RESPONSIBILITIES AND EXPECTATIONS ................................................................. 17
  ATTIRE AND ETIQUETTE ................................................................. 18
    Infection Control Guideline ................................................................. 19
  MSU COLLEGE OF OSTEOPATHIC MEDICINE STANDARD POLICIES ................................................................. 20
    ATTENDANCE POLICY ................................................................. 20
    POLICY FOR MEDICAL STUDENT SUPERVISION ................................................................. 22
      Supervisors of the Medical Students in the Clinical Setting ................................................................. 22
      Level of Supervision/Responsibilities ................................................................. 22
    STATEMENT OF PROFESSIONALISM ................................................................. 23
    STUDENT RIGHTS AND RESPONSIBILITIES ................................................................. 23
      MSU Email ................................................................. 23
    FACULTY RESPONSIBILITIES ................................................................. 24
    COURSE GRADES ................................................................. 24
      N Grade Policy ................................................................. 25
    STUDENT EXPOSURE PROCEDURE ................................................................. 25
    STUDENT VISA ................................................................. 25

STUDENT EXPERIENCE LOG ................................................................. 26

SUMMARY OF GRADING REQUIREMENTS ................................................................. 27
INTRODUCTION AND OVERVIEW

Welcome to IM 650 Core Internal Medicine In-Patient Clerkship, which is one of three Core Internal Medicine (IM) rotations you will complete successfully during the course of your clerkship years. Our internal medicine team has collaborated to offer selected topics in IM for your study through a series of three required clerkship rotations - IM 650 (inpatient IM rotation #1), IM 658 (Out-patient IM #1) and IM 660 (sub-internship inpatient IM #2). IM 650 must occur before IM 660 and is highly recommended, but not essential that IM 658 occur before IM 660. IM 660 should ideally be completed after IM 650 and 658 (or FCM 622), and it should ideally NOT occur prior to the 7th month of the third year to allow adequate exposure to inpatient medicine for the medical student. It is intended to be an advanced rotation with higher expectations of the student for performance. Preferably, it should be scheduled after C3 and all R2 core rotations are completed. Students may take FCM 622 in place of IM 658.

We believe these topics are the most common ailments affecting our U.S. population. If you put the time and effort into studying these modules you will be well prepared for internship, residency, and national tests you will take such as COMAT and COMLEX. It is also our hope that you will recognize the integral role of Internal Medicine, for it is a cognitively rewarding discipline for which there will always be a need.

ROTATION FORMAT
The instructional modules for the inpatient IM rotation are created to showcase a typical day for an Internist in the hospital. You will be assigned 4 modules during your four-week IM rotation. Each module is under 60 minutes. It is recommended that you complete review of the modules the weekend before your rotation starts. Quizzes should be taken towards the end of the rotation by the deadline date listed below.

GOALS AND OBJECTIVES

GOALS
The general goal of clerkship is to provide the environment needed for students to develop into knowledgeable, sympathetic, and sophisticated physicians. Additionally, it seeks to ensure that each student is able to work up a patient, to develop differential diagnosis, to formulate a treatment plan, and to consider an approach to managing the patient. Further, our aim is to teach students to apply the background in pathophysiology acquired in the pre-clinical years to the diagnosis and management of patients. Lastly, it is expected that students continue to expand their knowledge base and clinical judgment.

The following is an outline of the knowledge, skills, and behavior 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 an inpatient 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. **DIAGNOSIS II:** Students are expected to design a diagnostic strategy to narrow an initial differential diagnosis demonstrating knowledge of pathophysiology and evidence from literature.
   Another priority learning objective for this clerkship will be formulation of a diagnostic strategy, emphasizing use of the principles of clinical epidemiology (test sensitivity, specificity, pretest probability, predictive value) and cost effectiveness data to guide test selection and interpretation.

6. **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 settings, with reference to the relevant pathophysiology and best scientific evidence.

7. **PROCEDURES:** Perform 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.
8. **COMMUNICATION:** Present 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.

9. **CULTURAL COMPETENCE:** Understand 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.

10. **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.

This clerkship will also stress skills relevant to taking initiative and responsibility for learning, achieving personal growth, and supporting learning objectives of your colleagues. Students are expected to learn how to perform appropriate literature search as well as understand the limitations of the literature base.

Demonstrate knowledge and affirmation of ethical standards

11. **CAREERS IN MEDICINE:** Is medicine your cup of tea?

This clerkship will highlight available career paths in internal medicine including primary care versus subspecialty training. It will also encourage students to find mentors as they prepare for future choices.

**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.

**CORE COMPETENCIES**

The Core Competencies were developed by the AOA to represent seven defined areas. In 2007, 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:

- **Osteopathic Principles and Practice**
  - 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

- **Medical Knowledge**
  - Articulate basic biomedical science and epidemiological and clinical science principles related to patient presentation

- **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

- **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

- **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

- **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
• **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 patient.

**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/](https://com.msu.edu/)) and in the Student Handbook.

**REFERENCES**

**REQUIRED STUDY RESOURCES**

1. **Desire to Learn (D2L)**

2. **Access Medicine**
   *Compendium of various medical books, questions, images, videos that apply to internal medicine. Infinitely helpful resources that allows you to search a topic over multiple different texts.

   Available at: [https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/](https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/)

3. **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 online at: [https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/](https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/)

4. **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](https://www-clinicalkey-com.proxy1.cl.msu.edu/#!/browse/book/3-s2.0-C20161036684)

5. **Current Medical Diagnosis & Treatment 2021**
   * 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/](https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/)

6. **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/](https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/)

7. **Differential Diagnosis of Common Complaints, 7th Edition**
   *Enhances differential diagnosis and approach to complaints

   Available at: [https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/](https://accessmedicine-mhmedical-com.proxy1.cl.msu.edu/)
Available at: https://www-clinicalkey-com.proxy1.cl.msu.edu/#!/browse/book/3-s2.0-C20150222286

8. 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

*Review of physical exam skills
Available at: https://www-clinicalkey-com.proxy1.cl.msu.edu/#!/browse/book/3-s2.0-C20180009366

10. Dynamed Plus
*Online bullet point review of various topics
Available at: https://lib.msu.edu/health/medicine/

11. The 5-minute clinical consult 2020
*Alphabetized, quick bullet point review of topics focused on application of medical knowledge
Available at: https://oce-ovid-com.proxy2.cl.msu.edu/book/ovid

12. 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/

13. Board Vitals
*Board question practice
Available at: https://libguides.lib.msu.edu/medicalboardexamprep/comlex

SUGGESTED STUDY RESOURCES

1. Stat Pearls
   https://www.statpearls.com/
   *Quick overviews of topics with associated medical questions

2. Online Med Ed
   https://onlinemeded.org/?track=2
   *Free lecture-based videos that are geared to improving board scores

3. Merck Manuals
   https://www.merckmanuals.com/professional
   *Contains quick concise overviews of topics as well as a large catalog of procedural videos

4. 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
# ROTATION REQUIREMENTS

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>SUBMISSION METHOD</th>
<th>DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitions of Care</td>
<td>11:59 pm (Day 14) during this rotation submitted in D2L.</td>
<td>80% in 2 attempts to Pass and 90% in 2 attempt for HONORS</td>
</tr>
<tr>
<td>Harrison’s Questions Bank Quiz</td>
<td>11:59pm the last day of the rotation.</td>
<td>65% minimum score by 11:59 pm on the last day of the Rotation. You may take as many 100 item quizzes to achieve this score. Please submit only your first page with your score to the D2l drop box</td>
</tr>
<tr>
<td>View the 4 modules online and take end of module Quiz after completing each module</td>
<td>11:59pm last day of the rotation.</td>
<td>80% score on each of the individual weekly module quizzes with 2 attempts to Pass and 90% in 2 attempts for HONORS.</td>
</tr>
<tr>
<td>Student Daily Shift Schedule</td>
<td>11:59pm last day of the rotation.</td>
<td>Not to be submitted until the last Friday-Sunday of the rotation, and must be the schedule you worked, not what you were scheduled to work. This is a form that you create from your assigned shifts. We have no standard form – you create it.</td>
</tr>
<tr>
<td>Student Experience Log</td>
<td>11:59pm last day of the rotation.</td>
<td>Must be uploaded to D2L</td>
</tr>
<tr>
<td>Attending Evaluation of Clerkship Student</td>
<td>Can be accessed via the “Attending Evaluation” link in Kobiljak online schedule. Email completed evaluation to <a href="mailto:COM.Clerkship@msu.edu">COM.Clerkship@msu.edu</a></td>
<td>Last Day of Rotation</td>
</tr>
<tr>
<td>Student Evaluation of Clerkship Rotation</td>
<td>Can be accessed and submitted via the “Student Evaluation” link in Kobiljak online schedule.</td>
<td>Last Day of Rotation</td>
</tr>
</tbody>
</table>
WEEKLY READINGS/OBJECTIVES/ASSIGNMENTS

During each of the 4 weeks of the internal medicine rotation the student will be responsible for reviewing all content pertaining to that week’s topics and completing the corresponding quizzes. The content is meant to be a complete overview of a topic, with up to date medical information, that would prepare a PGY1 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.

Transitions of Care Modules
Must be completed by the end of week two at 11:59 pm (Day 14) during this rotation. The purpose of this set of modules is to help you understand how to transfer care to another provider. By completing at the end of week 2 you will have 2 weeks to practice implementing these techniques, which have been shown to decrease errors in medicine, thus improve patient outcomes.

There is a quiz in D2l based on the content in this set Transitions of Care online modules. You must obtain an 80% score on 2 attempts or 90% on 2 attempts for honors. This score is not averaged into the other module scores but will be scored independently. The in-module quizzes and content will be important to you achieving success on the overall transitions of care quiz that was created by the faculty based on this content and is located in D2L.

Transitions of Care Modules:
Discharge Planning and Documentation
Discharge Transition
Hand-Off Communication
Hand-Off Standardization
Medication Reconciliation
Psychosocial Assessment

Instructions for accessing the Access Medicine Transitions of Care Modules and completing them. Please Read carefully.

1. You must create an account in your name first.
   To create account:
   Go to https://lib.msu.edu/health/medicine/ then click on AccessMedicine
   Once you open it up you can make the account or just continue on in it to review things if you already have an account. However, you will all eventually need an account because there will be times that your will need to email the Instructor of Record documentation.
   Make sure you are logging into your account before you work on the case so it records it as you.

2. In Access Medicine
   Once in Access Medicine click on Cases, then select Internal Medicine Cases, and it will take you to a page that has links to all of the inpatient IM cases, the outpatient IM case list, and the Transitions of Care list.
**IM 650**

**Harrison’s Question Bank Quiz**

Instructions for accessing In Access Medicine

1. Go to [https://lib.msu.edu/health/medicine/](https://lib.msu.edu/health/medicine/) then click on AccessMedicine
2. Once in Access Medicine, select “Cases”, then “Fluid/Electrolyte Acid Base Cases”
   - This will bring you to Harrison's Fluid/Electrolyte & Acid-Base Cases
   - Select “Go to Review Questions”

Create a 100-question quiz for yourself with the following guidelines:

- 20 of 156 available Section II: Cardinal Manifestations and Presentation of Diseases
- 5 of 95 available Section III: Oncology and Hematology
- 10 of 286 available Section IV: Infectious Diseases
- 15 of 171 available Section V: Disorders of the Cardiovascular System
- 13 of 95 available Section VI: Disorders of the Respiratory System and Critical Care Illness
- 13 of 46 available Section VII: Disorders of the Kidney and Urinary Tract
- 12 of 118 available Section VIII: Disorders of the Gastrointestinal System
- 0 of 95 available Section IX: Rheumatology and Immunology
- 12 of 123 available Section X: Endocrinology and Metabolism
- 0 of 96 available Section XI: Neurologic Disorders

Submit your score sheet to the D2L Dropbox (You must achieve a minimum of 65% on the hundred item combined exam to receive credit. You may take as many 100 item quizzes as it takes to achieve this. Each time you select the number of questions assigned the computer will select them from its question bank. This should help prepare you for COMAT and part 2 of boards. Please submit only the front page with your name and score to the drop box).

**Weekly Modules and Quizzes**

**Week 1**

**Topics**
1. Acute Coronary Syndrome
2. Approach to Anemia
3. Congestive Heart Failure

**Specific Learning Objectives**

**Acute Coronary Syndrome**

- Consistently explain pathophysiology of Coronary disease
- Recite the risk factors for coronary disease
- Provide a basic work up with laboratory and imaging for a chest pain patient
- Combine history, physical exam, EKG, and laboratory findings when meeting a new patient to decide if they are having an acute coronary syndrome
- Quickly identify a STEMI on EKG. STEMI= ST Elevated Myocardial Infarction
- Identify EKG changes of ischemia and apply these to risk stratification of a patient for coronary disease
Reproduce the various branches of treatment for NSTEMI/UA into a treatment plan given various medications indications and contraindication. NSTEMI= Non-ST Elevated Myocardial Incarction; US=Unstable Angina

Memorize and recite the timing and indication of reperfusion therapy for STEMI as well as being familiar with various contraindications

**Approach to Anemia**

- Recite at least 5 items on a differential diagnosis for anemia based on the size the red blood cell
- Systematically approach a workup for anemia based on a basic complete blood count, patient history and demographics
- Consistently utilize peripheral smear findings to refine differential diagnosis of anemia
- Provide at least 5 etiologies of anemia based on MCV
- Provide a workup for a patient to prove hemolysis
- Consistently decide on whether a patient needs a transfusion

**Congestive Heart Failure**

- Consistently diagnose an exacerbation of CHF on physical exam while being aided by lab work and imaging
- Use a focused history to tease out factors that lead to the exacerbation
- Interpret Echocardiogram report to grade the severity as well as the defect that has led to the CHF
- Recite the Acute treatment for pulmonary edema in CHF quickly
- Provide basic long-term treatment aimed at reducing vicious cycle in CHF under various clinical scenarios as it relates to medical indications and contraindications

**Week 2**

**Topics**
1. Acute Kidney Injury
2. Electrolyte disorders (K, Ca, Mg, Phos)
3. Sodium Disorder
4. Urinary Tract Infection

**Specific Learning Objectives**

**Acute Kidney Injury**

- Include AKI in a differential diagnosis based on various signs and symptoms
- Recognize AKI quickly and efficiently
- Stage the degree of AKI based on established baseline creatinine
- Recite the etiology of AKI (pre renal, post renal, intrinsic) from most common to least common
- Formulate a differential using initial lab work as well as physical exam and history to assist in patient care on rounds
- Provide a stepwise approach to work up and diagnosis to avoid unnecessary/costly workups
- Calculate a FeNa when it is helpful to order such testing
- Recognize possible warning signs of “zebras”
- Recommend treatment for AKI based on the etiology
Recognize and Recite the indications for dialysis emergently
Recommend strategies to help prevent AKI

**Electrolyte disorders (K, Ca, Mg, Phos)**
- Identify the signs and symptoms of potassium disorders
- Recite the major components of the differential diagnosis of hypokalemia and hyperkalemia as it relates to the mechanism
- Provide treatment for hypokalemia by the most appropriate route
- Provide treatment for hyperkalemia under various clinical conditions in an immediate manor
- Recite and identify the electrocardiographic changes of hypo and hyperkalemia consistently
- Quickly correct serum calcium levels based on albumin in your head
- Explain hormonal regulation of calcium and connect this to forming a differential diagnosis for hyper and hypocalcemia
- Provide a workup to narrow down your differential diagnosis of hypercalcemia and hypocalcemia
- Recite the treatment for hypercalcemia while factoring in the severity of disease
- Apply the signs and symptoms of electrolyte disturbances to differential diagnosis of common presentations
- Identify EKG changes as they relate to electrolyte disturbances
- Consistently suggest quantity and route of replacement in routine electrolyte deficiencies

**Sodium Disorders**
- No longer be intimidated by differential diagnosis for hyponatremia/hypernatremia
- Recite all major disorders that lead to hyponatremia/hypernatremia based on a patient’s fluid status
- Pose a theory as to etiology of hyponatremia/ hypernatremia based on clinical presentation and basic labs
- Order and interpret labs to confirm etiology
- Provide basic treatment for hyponatremia/ hypernatremia

**Urinary Tract Infection**
- Consistently list the causative organisms responsible for UTI
- Accurately diagnosis a urinary tract infection given a urinalysis and a patient presentation
- Formulate an appropriate work up for a patient with UTI knowing the indications for different labs and imaging
- Identify situations that call for the need of a specialist
- Provide basic antimicrobial selection under various clinical scenarios
- Disposition a patient based on clinical indicators and presentation

**Week 3**

**Topics**
5. Asthma
6. Chronic Obstructive Pulmonary Disease
7. Community Acquired Pneumonia
8. Venous Thromboembolism
Asthma
- Consistently take a focused history about asthma when interviewing a patient
- Make a clinical diagnosis of asthma based on signs and symptoms
- Make a definitive diagnosis of asthma based on pulmonary function testing
- Grade severity of asthma based on symptoms as well as pulmonary function testing
- Provide a treatment plan for status asthmaticus
- Provide a treatment plan for asthma depending on severity
- Identify various asthma syndromes based on symptoms as well as provide treatment
- Consistently instruct patients on proper albuterol use

Chronic Obstructive Pulmonary Disease
- Apply the GOLD classification for COPD
- Suggest additional treatment for patients that are not controlled on an outpatient treatment regimen
- Quickly and consistently diagnose a patient with an exacerbation of COPD
- Recite differential diagnosis for wheezing as it relates to adults and children
- Consistently take a history as it relates to COPD teasing out triggers for exacerbation
- Suggest an initial work up for an exacerbation of COPD knowing why each test is ordered
- Be able to quickly disposition a patient with an exacerbation of COPD based on various clinical indicators
- Identify and suggest patients that are appropriate for discharge

Community Acquired Pneumonia
- Review the IDSA/ATS guidelines for CAP
- Review bacterial etiology under various clinical conditions
- Apply guidelines to site of care decisions
- Review the utility of testing and applying to different circumstances
- Select appropriate antibiotics for CAP
- Apply work up to “non-responders” for treatment decisions

Venous Thromboembolism
- Explain the pathophysiology that leads to VTE to a layman – VT=Venous Thromboembolism
- Quickly recite the differential diagnosis for DVT and apply it to the initial work up for leg edema – DVT= Deep Vein Thrombosis
- Rank the likelihood of VTE on a differential diagnosis by being able to consistently recite the risk factors for VTE
- Utilize different systems (Wells’, PERC) for deciding what the risk or likelihood of VTE disease
- Be able to order testing to confirm diagnosis of VTE based on likelihood of disease under various clinical conditions
- Suggest different treatment options for VTE under various clinical circumstances by applying contraindications of different anticoagulants
- Identify patients with VTE where advanced treatment options (IVC filter, thrombolysis, thrombectomy) may be needed
- Be able to provide a duration of therapy for VTE under various clinical circumstances
- Explain to patients what the complications are of VTE disease
Week 4

**Topics**

9. Cholestatic Liver Disease
10. Hepatocellular Disease
11. Approach to Elevated Liver Function Testing
12. Inflammatory Bowel Disease
13. Pancreatitis

**Specific Learning Objectives**

**Approach to Elevated Liver Function Testing “LFTs”**
- Approach elevated liver function testing and identify patterns to identify where potential liver damage is taking place
- Recite the differential diagnosis for hepatocellular damage
- Recite the differential diagnosis for cholestatic damage
- Identify what lab tests truly evaluate the synthetic function of the liver
- Explain how imaging can be used to assist in the differential of jaundice

**Cholestatic Liver Disease**
- Identify a cholestatic pattern when liver function tests (LFT) are elevated
- Recite a differential diagnosis for cholestatic pattern of elevated “LFTs”
- Use imaging efficiently to refine differential diagnosis
- Identify patients that require acute surgical management
- Review a patient’s medication list and identify medications that may potentially cause biliary stasis
- Identify patients that potentially have various cholestatic diseases based on signs and symptoms, demographics, and provide a work up to make a definitive diagnosis
- Provide additional or confirmatory testing to refine differential
- Provide basic treatment of various cholestatic diseases

**Hepatocellular Disease**
- Recite 5 etiology of elevated hepatocellular injury
- Provide a work up as to the etiology of hepatocellular injury under various clinical scenarios
- Be familiar with treatment of each hepatocellular disease
- Identify the different disease states of viral hepatitis based on serology

**Inflammatory Bowel Disease**
- Recite the pathological differences in distribution and appearance of IBD consistently
- Know the signs and symptoms of IBD so it may be kept in your differential diagnosis of common GI complaints
- Identify extraintestinal manifestations of IBD
- Recite the initial work up for IBD knowing what you are looking for with each test
- Understand and decide on imaging/endoscopy to make diagnosis of IBD
Familiarize yourself with treatment of UC and CD based on severity
Recite the in-patient management of IBD quickly/consistently
Monitor side effects and potential complications of immunomodulators

**Pancreatitis**
- Recite 10 causes of pancreatitis; knowing which 2 are the most common
- Quickly provide a basic work up when pancreatitis is suspected
- Provide and advanced work up using labs and imaging when the etiology of pancreatitis is unclear
- Consistently diagnose pancreatitis based on signs and symptoms of disease in combination with laboratory and imaging findings
- Familiarize yourself with factors that indicate a worse prognosis in pancreatitis
- Construct a basic treatment plan for pancreatitis
- Familiarize yourself with complications of pancreatitis and how this might change management

**COMAT EXAM INFORMATION**

**DUE DATE:** The last Friday of the rotation

All students are required to take the NBOME COMAT examination in Internal Medicine on the last Friday of either their second or third IM rotation. The score for the exam will be considered part of the IM 660 rotation grade and also for honors designations in all three IM courses.

If this deadline is not met, the student will be required to reschedule this exam at a later date. 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 within 2 SD from the MSUCOM mean of the exam that you take to receive a passing grade. Each student will be allowed to take the exam 2 times before receiving an “N” grade for the rotation. When a student must sit for a re-take of the exam, s/he will be contacted by the Course Assistant, who will provide the student with a deadline by which s/he 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 Office’s COMAT webpage: [https://com.msu.edu/current-students/clerkship-medical-education/comat](https://com.msu.edu/current-students/clerkship-medical-education/comat)

**DUE DATE:** The last Friday of the Rotation
If a student requires an accommodation, a valid VISA from the Resource Center for Persons with Disabilities must be presented to the COM Clerkship Office 7 days in advance of the COMAT examination date. The student must also disclose which allowed accommodations s/he intends to use for the exam 7 days in advance of the COMAT examination date.

The second attempt of the exam will need to be done within the next two cycles the COMAT exam is offered, or the students exam schedule will allow, or the student will receive an “N” grade for the rotation.

**ROTATION EVALUATIONS**

**Attending Evaluation of Student**
Students are responsible for assuring that his/her clinical supervisor receives the appropriate evaluation form. Forms can be accessed via the “Attending Evaluation” link in the student’s Kobiljak online Clerkship schedule.

Students should actively seek feedback on his/her performance throughout the course of the clinical rotation. Students should also sit down and discuss the formal evaluation with the clinical supervisor.

Students should keep a copy of the evaluation and leave the original with the Medical Education Office at the clinical training site where that office will review, sign, and forward the completed form to the COM Clerkship Team. Any evidence of tampering or modification while in the possession of the student will be considered “unprofessional behavior” and will be referred to the MSUCOM Spartan Committee Clearinghouse for resolution, per MSUCOM’s Common Ground Framework for Professional Conduct or to the Committee on Student Evaluation (COSE).

Grades are held until all rotation requirements, including evaluation forms, are received. Be sure you are using the correct form.

**Student Evaluation of Clerkship Rotation**
Students will submit their rotation evaluations electronically at the conclusion of every rotation by accessing their online evaluation system at:

http://hit-filemakerwb.hc.msu.edu/Clerkship/login_student.html

**Unsatisfactory Clinical Performance**
The Instructor of Record and/or the Assistant Dean for Clerkship Education will review/investigate a student’s performance on a rotation when a concern is raised by the supervisor(s), and 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.

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 PROCESS**

If a student does not successfully complete the rotation requirements of the course, the student will receive an ET 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. Quizzes

The student who fails to achieve an 80% on each weekly quiz with 2 attempts will be allowed to take a comprehensive final examination that will be a random selection of similar 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.

2. Evaluations and Student Experience Log

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

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

Please note that while it is the responsibility of the student to ensure the Attending Evaluation of the Clerkship Student is completed, this requirement may extend beyond the corrective action date. Additionally, in the event of a COMAT failure on first attempt, the corrective action for the repeat COMAT may extend beyond 14 days.

As determined by the Instructor of Record, 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.

If a student successfully completes the Corrective Action process, as determined by the Instructor of Record, the student will receive credit for the deficient academic grading requirement(s) and be eligible for a rotation grade change from ET to Pass (pending the Attending Evaluation of the Clerkship Student and COMAT score).

BASE HOSPITAL REQUIREMENTS
Students are responsible for completing all additional requirements set by the hospital/clinical site in which the student is completing the rotation. Students are not responsible for reporting results of requirements outside the ones listed above to the college.

STUDENT RESPONSIBILITIES AND EXPECTATIONS
The Internal Medicine clerkship is divided into three four-week rotations that include an IM- Ambulatory, IM-Hospital and IM-Sub-I clerkship. This will provide the mechanism to achieve the objectives that will be covered in internal medicine.
During the third year inpatient IM rotation, 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 student more emphasis will be placed on student responsibility and your ability to manage basic 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 very 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 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.

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.

- Show up early.
- Demonstrate genuine interest.
- Record daily clinical questions for nightly study.
- Reading at least one hour per day will elevate you to the top of your class and will make Board preparation much easier.

**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 very 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 cress 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.
Scrub 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.

ALL incidents of exposure to blood or body fluids such as parenteral (needle stick or cut); mucous membranes (splash to eyes, nose or mouth); cutaneous (contact with blood or body fluids on ungloved hands or other skin surfaces that may be cut, chapped, abraded or affected by active dermatitis should be reported immediately to attending physician, student director, and MSUCOM

**Infection Control Guideline**

**Universal Precautions:**

- Consider all blood, visibly bloody secretions, genital secretions, and all bodily fluids infectious.
- Wear gloves when exposed to blood, bodily fluids or genital secretions. Change your gloves and wash hands after each procedure and before contact with another patient.
- Wear a mask and goggles when blood or bodily fluid may splash in your face.
- Wear a waterproof gown when blood or body fluid may soak a cloth gown.

ALL incidents of exposure to blood or body fluids such as parenteral (needle stick or cut); mucous membranes (splash to eyes, nose or mouth); cutaneous (contact with blood or body fluids on ungloved hands or other skin surfaces that may be cut, chapped, abraded or affected by active dermatitis should be reported immediately to attending physician or student director.

**Most Common Exposure Risks:**
Hepatitis B (HBV), Hepatitis C (HCV), HIV

**What should you do if exposure occurs?**

**Immediate Response:**
- Force bleed the site if possible
- Clean wound with soap and water
- Apply direct pressure if needed
- Flush mucous membranes with water or saline for 3-5 minutes

Prompt notification is critical to evaluate possible treatment options including IgG, HBIG etc. Students should discuss any exposure with their supervising attending and student director. Students exposed to or with infectious material or communicable illness, including chicken pox, shingles, measles, or diarrheal illness, must consult with course director or employee health services about the advisability of working with the patients.

Please see the [MSU Student Exposure Procedure](#) below.
ATTENDANCE POLICY

OVERVIEW
Michigan State University College of Osteopathic Medicine (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 vacations already appearing in schedules and should only request 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 these requirements according to the respective course syllabus.

GENERAL POLICY

- All absences from rotations must be **excused absences** obtained by completing the *Clerkship Program Excused Absence Request Form*.
  - Appropriate signatures must be obtained from both the attending physician and the student coordinator at the rotation site.
  - MSUCOM Assistant Dean for Clerkship Education must approve absences for prolonged illnesses, bereavement, research presentations/conferences, or absences exceeding the maximum time off any one rotation.
  - Once appropriate approval signatures are obtained, forms should be maintained for your records in the event they are requested or required at a later date.

- **Unexcused absences** are absences taken without the proper completion of the *Clerkship Program Excused Absence Request Form*, or absences outside of those listed 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).

<table>
<thead>
<tr>
<th>Length of rotation</th>
<th>Maximum number of days off</th>
<th>Should an absence exceed these limits, the student is responsible for requesting additional days off from the Assistant Dean for Clerkship Education via email (<a href="mailto:com.clerkship@msu.edu">com.clerkship@msu.edu</a>) prior to the absence.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 weeks</td>
<td>2 days</td>
<td></td>
</tr>
<tr>
<td>2 weeks</td>
<td>0 days</td>
<td></td>
</tr>
</tbody>
</table>

Exception for residency interviews from October to January in Year 4 only

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 during Year 4 for interview purposes only. If interview absences exceed these totals, the student must request additional days off from the MSUCOM Instructor of Record (IOR) for the course/rotation by submitting a *Clerkship Program Excused Absence Request Form* to the Course Assistant (CA). Contact information for the IOR and CA are found on the first page of the respective MSUCOM course syllabus.
<table>
<thead>
<tr>
<th>Absence Type</th>
<th>Qualifications</th>
<th>Maximum number of days off</th>
<th>Details</th>
<th>Required Approval from Assistant Dean for Clerkship Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Day</td>
<td>Illness&lt;br&gt;Medical/Dental appointments&lt;br&gt;Wedding, family graduations (additional reasons must be discussed with the Asst Dean for Clerkship Education prior to request)</td>
<td>5 total days per year (individual events must comply with the max of 2 days off any 4-week rotation)</td>
<td>Vacations must be planned during allotted vacation time in schedule. Vacations are not acceptable personal day absences.</td>
<td>No</td>
</tr>
<tr>
<td>Jury Duty</td>
<td>Court documentation must accompany the Clerkship Program Absence Request Form.</td>
<td>N/A</td>
<td>Jury duty, when obligated, is not considered a personal day absence</td>
<td>Yes</td>
</tr>
<tr>
<td>Hospital-organized community events</td>
<td>Example: Special Olympic Physicals</td>
<td>N/A</td>
<td>These events would be considered part of the rotation and not a personal day absence.</td>
<td>No</td>
</tr>
<tr>
<td>Examination</td>
<td>COMLEX USA Level 2&lt;br&gt;CE/USMLE Step 2&lt;br&gt;CK/Canadian MCCEE</td>
<td>1 day</td>
<td>Students should be reporting to rotation before/after examination</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>COMAT/NBME shelf examinations</td>
<td>Time required to complete exam</td>
<td>While on required/core rotations, no excused absences for any professional meeting will be allowed unless the student is presenting research in which they have participated. Required for request to Asst Dean for Clerkship Education: conference agenda, location, date of presentation, invitation, or confirmation of presentation by conference staff, proposed dates of absence.</td>
<td>Yes</td>
</tr>
<tr>
<td>Conference/Research Presentation</td>
<td>Research presentation on core rotation</td>
<td>Travel and presentation time only</td>
<td>Student must submit Clerkship Program Excused Absence Request Form and copy of conference agenda to the Assistant Dean for Clerkship Education to attend one (1) professional meeting on a 4-week rotation. Students cannot miss rotation days for a conference during a 2-week elective rotation.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Conference or research presentation while on an elective rotation</td>
<td>3 days on a 4-week elective rotation</td>
<td>Students-contact the Assistant Dean for Clerkship Education to discuss time off rotations</td>
<td>Yes</td>
</tr>
<tr>
<td>Prolonged Illness, Bereavement, Maternity Leave</td>
<td>Medical related absence or bereavement</td>
<td>TBD</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Clerkship Program Excused Absence Request Forms:* Once appropriate approval signatures are obtained; forms should be maintained for your records in the event they are requested or required at a later date.
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 and 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 the 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 factors, but not limited to:

- 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 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.

**STATEMENT OF PROFESSIONALISM**

Principles of professionalism are not rules that specify behaviors but guidelines that provide direction in identifying appropriate conduct. These principles include the safety and welfare of patients, competence in knowledge and skills, responsibility for consequences of actions, professional communication, confidentiality, and lifelong learning for maintenance of professional skills and judgments. Professionalism and professional ethics are terms that signify certain scholastic, interpersonal and behavioral expectations. Among the characteristics included in this context is the knowledge, competence, demeanor, attitude, appearance, mannerisms, integrity, and morals displayed by the student to faculty, peers, patients, and colleagues in other health care professions.

Students are expected to conduct themselves at all times in a professional manner and to exhibit characteristics of a professional student.

**STUDENT RIGHTS AND RESPONSIBILITIES**

Each individual student is responsible for their behavior and is expected to maintain standards of academic honesty. Students share the responsibility with faculty for creating an environment that supports academic honesty and principles of professionalism. Proper relationship between faculty and student are fundamental to the college's function and this should be built on mutual respect and understanding together with shared dedication to the education process. It is a fundamental belief that each student is worthy of trust and that each student has the right to live in an academic environment that is free of injustice caused by dishonesty. While students have an obligation to assist their fellow students in meeting the common goals of their education, students have an equal obligation to maintain the highest standards of personal integrity.

**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.

**FACULTY RESPONSIBILITES**

It is the responsibility of the college faculty to specify the limits of authorized aid (including but not limited to exams, study aids, internet resources and materials from senior students) in their syllabi, and it is the responsibility of students to honor and adhere to those limits. Course instructors shall inform students at the beginning of the semester of any special criteria of academic honesty pertinent to the class or course.

It is the responsibility of the clinical faculty to provide students with ongoing feedback during rotation upon request. Clinical faculty are generally recommended (though not required) to limit student assigned duty hours from 40 to 60 hours weekly (and not exceeding 60 hours). Both faculty and students are to be treated fairly and professionally to maintain a proper working relationship between trainer and trainee.

**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 syllabi. 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.

**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.

**ET/Extended Grade** – means that a final grade (‘Pass’ or ‘No Grade’) cannot be determined due to one or more missing course requirements. The ET grade 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 ‘ET’ 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 may be found on the Clerkship Medical Education page of the MSUCOM website here (https://com.msu.edu/current-students/clerkship-medical-education).

Contact Assistant Dean for Clerkship Education, Dr. Susan Enright, if exposure incident occurs: enright4@msu.edu.

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 (RCPD) at 517-884-RCPD, or on the web at www.rcpd.msu.edu. Once a student’s eligibility for (clinical and/or testing) accommodation has been determined, the student may be issued a Verified Individualized Services and Accommodations (VISA) form. Students must present this VISA form to the Clerkship Team (COM.Clerkship@msu.edu), A-332 East Fee Hall, at the start of the semester in which they intend to use their accommodations (for tests, projects, labs, etc.). Accommodation requests received after this date will be honored whenever possible.

If updates or modifications to an existing VISA form are made after the semester begins, it is the responsibility of the student to submit an updated version to the Clerkship Team if he or she intends to use the new accommodation going forward.
**STUDENT EXPERIENCE LOG**

**IM 650 Internal Medicine In-Patient**

**Mid Rotation Evaluation**

| Date of evaluation: |  |
| Areas of Strength: |  |
| Areas for Improvement: |  |
| Attending Signature/Printed Name: |  |

Students are required to complete the student experience logs, and submit them via D2L dropbox by 5pm on the last day of the rotation.

On this rotation you are required to encounter the below clinical presentations, if your rotation should not permit the following, you are required to gain the knowledge via modules/readings per syllabus. Place a checkmark where appropriate.

<table>
<thead>
<tr>
<th>Clinical Presentation</th>
<th>Experience via patient on rotation</th>
<th>Experience gained via Readings/modules. (per syllabus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Coronary Syndrome</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute Kidney Injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrolyte abnormalities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningitis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pyelonephritis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetic Ketoacidosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pancreatitis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute asthma exacerbation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute COPD exacerbation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thromboembolic DZ (DVT &amp; PE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coagulation disorders</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Wellness:** An active process of becoming aware of and making choices toward a healthy and fulfilling life.

Have you set one personal wellness goal you would like to accomplish during this rotation?

- [ ] Yes
- [ ] No

Did you accomplish this goal by the end of the rotation?

- [ ] Not at all
- [ ] Somewhat
- [ ] Completely accomplished goal or exceeded

**Skills/Procedures**

<table>
<thead>
<tr>
<th>Date Complete</th>
<th>Required procedures to be performed by student</th>
<th>Role</th>
<th>Supervisor Name</th>
<th>Supervisor Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evaluate one patient with in-hospital fall, and be able to discuss the relevant evaluation, including brain imaging if on anti-coagulants.</td>
<td>Observe</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assist with the insertion of one arterial line or central line.</td>
<td>Observe</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arterial blood gas results interpretation and suggested management of results to restore homeostasis.</td>
<td>Observe</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attendance at one Rapid response Team event or Code Blue (cardiac arrest in house event) with performance of CPR if allowed.</td>
<td>Observe</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OMM- briefly describe how you used OMM on one patient during this rotation:

__________________________________________________________________________

 Comments:

__________________________________________________________________________

I participated in interprofessional collaboration (collaboration on patient care with healthcare workers of different professional backgrounds) on this rotation:

- [ ] Yes
- [ ] No

Describe one encounter on this rotation when you collaborated on patient care with a healthcare worker of different professional background. Please identify the profession of the healthcare worker and how you perceived the experience (positive/neutral/negative).

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

Attending Signature:

__________________________________________________________________________

(Verifying content of logs)
# SUMMARY OF GRADING REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Honors Designation</th>
<th>Pass</th>
<th>Extended Grade</th>
<th>No Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transitions of Care</strong></td>
<td>* Meet all</td>
<td>* Meet all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90% on 2 attempts by 11:59 pm on the last day of week 2 of the</td>
<td>80% in 2 attempts</td>
<td>Will be the</td>
<td></td>
<td>Failure to meet the quiz and or</td>
</tr>
<tr>
<td>Rotation (quiz in D2l)</td>
<td>by 11:59 pm on the</td>
<td>conditional</td>
<td></td>
<td>the corrective action.</td>
</tr>
<tr>
<td><strong>Harrison’s Questions Bank Quiz</strong></td>
<td>completed 65%</td>
<td>grade until</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed 65% minimum score and uploaded by 11:59pm the last day</td>
<td>minimum score by</td>
<td>all requirements of this</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of the rotation.</td>
<td>11:59 pm on the</td>
<td>rotation are met.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>**View the 4 modules online. Take end of module Quiz after</td>
<td>Completed by 11:59</td>
<td>Will be the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>completing each module**</td>
<td>pm the last day of</td>
<td>conditional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the Rotation with a 90% score on each module with 2 attempts.</td>
<td>the Rotation with</td>
<td>grade until all</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Student Experience Log</strong></td>
<td>80% in 2 attempts</td>
<td>requirements of this</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed 100% and uploaded by 11:59 pm the last day of the</td>
<td>by 11:59 pm on the</td>
<td>rotation are met.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rotation.</td>
<td>last day of the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shift Schedule (for IM 650, IM 658 and IM 660)</strong></td>
<td>Completed 100% and</td>
<td>Will be the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed 100% and uploaded by 11:59 pm the last day of the</td>
<td>uploaded by 11:59</td>
<td>conditional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rotation. You must upload the schedule you worked. There is no</td>
<td>pm the last day of</td>
<td>grade until all</td>
<td></td>
<td></td>
</tr>
<tr>
<td>standard form, and you can just upload the four week calendar</td>
<td>the rotation. You</td>
<td>requirements of this</td>
<td></td>
<td></td>
</tr>
<tr>
<td>marking the shifts you worked.</td>
<td>must upload the</td>
<td>rotation are met.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>schedule you</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>worked. There is no</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>standard form, and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>you can just upload</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>the four week</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>calendar marking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>the shifts you</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>worked.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Failure to complete and upload within two semesters after the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>rotation ends.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Failure to complete and upload within two semesters after the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>rotation ends.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Requirement</td>
<td>Honors Designation * Meet all</td>
<td>Pass * Meet all</td>
<td>Extended Grade</td>
<td>No Pass * Any one below</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
<td>----------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Student Evaluation of the Rotation</td>
<td>➢ Completed 100% and uploaded by 11:59 pm the last day of the rotation.</td>
<td>➢ Completed 100% and uploaded by 11:59 pm the last day of the rotation.</td>
<td>➢ Will be the conditional grade until all requirements of this rotation are met.</td>
<td>➢ Failure to complete and upload within two weeks after the rotation ends.</td>
</tr>
<tr>
<td>COMAT Exam (scored under course 660)</td>
<td>➢ Score at or above 1.0 SD above the College Mean for the day you take the exam on first attempt.</td>
<td>➢ Score at or above 2.0 SD below the College Mean 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.</td>
<td>➢ Will be the conditional grade until all requirements of this rotation are met.</td>
<td>➢ Failure to pass the exam with two attempts. ➢ Failure to take the retake in the time given. ➢ 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.</td>
</tr>
<tr>
<td>Attending Evaluation of the Clerkship Student</td>
<td>➢ Must have all Meets Expectations in all sections and Meets or Exceeds Expectations in the overall sections.</td>
<td>➢ May receive up to 1 Below Expectations in any subsection with an Meets or Exceeds Expectations in the overall sections.</td>
<td>➢ Will be the conditional grade until all requirements of this rotation are met.</td>
<td>➢ Receives two or more “Below Expectations” in any subsection on the evaluation and after the chair review and discussion. ➢ Displays indicators of marginal performance on any clerkship rotation.</td>
</tr>
</tbody>
</table>