Please Note: 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 major changes will generally be instituted at the beginning of the school year, most minor changes may 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 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 or Sub-I inpatient IM #2). IM650 must occur before IM660 and is highly recommended, but not essential that IM658 occur before IM660. IM 660 should ideally be completed after IM 650 and 658 and 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.

The fourth year of medical school is an exciting time, which continues to provide students with a well rounded clinical foundation to ensure that all graduating physicians are well trained and well prepared to practice medicine. 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 strong foundation in your approach to internal medicine. The more interest you demonstrate in learning, the more teaching you will receive. By completing the 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 important 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 fourth 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 physical’s 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.

In addition to in hospital requirements medical students will complete a series of weekly modules and assignments designed to broaden their scope of internal medicine and prepare for exams. These modules/reading assignments will require about two 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.

This syllabus is divided into the following areas:

- **Goals & Objectives** – A list of learning goals & objectives covering the scope of internal medicine
- **References** – A list of recommended reading references for this specialty; these include recommended readings to meet the stated goals and objectives
- **Summary of Didactic Requirements** – A list of required didactic elements for this month with completion dates and respective percentage of grade (readings will be housed in D2L)
• **Core Competencies** – A list of core competencies (as identified by the American Osteopathic Association) addressed during this month

• **Summary of Clinical Requirements** – A list of required activities for this month with required submission method and completion dates

• **Internal Medicine COMAT Exam Info** – Explanation of the COMAT exam for Internal Medicine

• **Rotation Remediation Process** – An explanation of remediation steps should you not pass the rotation initially

### 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
2. PHYSICAL EXAM
3. DIAGNOSTIC EVALUATION
4. DIAGNOSIS
5. MANAGEMENT
6. PROCEDURES
7. COMMUNICATION
8. CULTURAL COMPETENCE
9. PROFESSIONALISM

### OBJECTIVES

I. Provide the student with the fundamental knowledge base in internal medicine.

II. Introduce the student to basic procedures relevant to the practice of internal medicine.

III. Facilitate an understanding of the approach to acute care clinical problem solving.

IV. Promote the acquisition of simple basic skills for the diagnosis and management of common internal medicine cases.

V. Encourage the continued development of the student’s professional attitude and behavior.
References

Suggested Textbooks and Resources

1. Student MKSAP –
   - MKSAP for Students 5 Digital
     ✓ This is a strongly recommended resource for all of the Internal Medicine rotations. It must be purchased by the individual student. MKSAP for Students 5 Digital. [http://mksapstudents5.acponline.org/](http://mksapstudents5.acponline.org/)
     ✓ Board questions are strongly reflected by this resource.
     ✓ It can be purchased at a discounted price of ~ $60.00 as a student member.
     ✓ Membership is free.
     ✓ IM attendings and residents use MKSAP which updates every three years.

2. Harrison’s – Online: [http://libguides.lib.msu.edu/medicalebooks](http://libguides.lib.msu.edu/medicalebooks)

   ✓ This is a strongly recommended text for all Internal Medicine rotations. It must be purchased by the individual student and cost $99.95;


5. Access Medicine

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.

- UpToDate – UpToDate.com
- Epocrates
- PreOpEval
- The Sanford Guide
- ACP Doctors Doctor’s Dilemma

Accessing the Electronic Resources Using MSU’s Library will provide many of these for free

[www.lib.msu.edu](http://www.lib.msu.edu)
Other References by Subject

Cardiology


Nephrology


Infectious Disease

Gastroenterology


Pulmonary


Hematology/Oncology

http://www.accessmedicine.com

http://www.accessmedicine.com
IM 660 Internal Medicine Sub-I R2 Syllabus version 11-6-2014

IM 660 In-Patient Internal Medicine Weekly Objectives

Rotation Format: Each week during the sub-I rotation the student will be responsible for completing a module assignment, reviewing a reference sheet, reading assignment and highly encouraged to participate in a module activity. The subjects are designed to sharpen your understanding of complicated patients in the hospital setting. Each module is composed of either questions or case based assignments. Each weekly module is designed to be completed in a total of two hours per week plus the recommended module activity. The module activity is not a part of your grade, but is highly encouraged. Each week students will be required to complete the assignments by the end of the week.

Week 1

Topics
A. Cardiology
   a. EKG Interpretation
   b. Pericardial Disease
   c. Hypertension Urgency /Emergency
B. Nephrology
   a. Nephrotic Syndrome
   b. Nephritic Syndrome

Specific Learning Objectives

EKG Interpretation
- Identify basic normal ECG waveform morphology
- Describe the normal physiology of cardiac conduction
- Distinguish between dysrhythmias
- Describe the distinguishing features of each basic dysrhythmia

Pericardial Disease
- List the various causes of pericardial disorders
- Recognize physical exam finding of pericardial disease
- Identify EKG findings associates with pericardial diseases
- Know the appropriate labs and imaging needed to order when managing pericardial disease
- Know how to manage complications such as pericardial tamponade

Hypertension Urgency/Emergency
- Define hypertensive urgency and emergency
- Identify various clinical presentations of hypertensive emergency and urgency
- Explain appropriate treatment options when treating hypertensive emergency and urgency

Nephrotic/Nephritic Syndrome
- Define nephritic and nephritic syndrome.
- Identify causes for nephritic and nephritic syndrome
**Module A and B Assignment**

1. EKG Interpretation Module (see D2L)
2. Review Pericardial Reference Sheet (see D2L)
3. HTN Urgency/Emergency Reading Assignment
   a. MKSAP for Students 5 Digital: General Internal Medicine; Chapter Hypertension
   b. *Harrison’s Internal Medicine:* Part 8 Disorders of the Cardiovascular System Section 4 Vascular Disease 230 Hypertensive Vascular Disease pg 1480 Malignant Hypertension
   c. John Hopkins Internal Medicine Board Review: Read Chapter 2 pages 7-14
4. Case Presentations Nephrotic/Nephritic Syndrome Module (see D2L)

**Module A and B Activity:** observe an exercise or pharmacological stress test; observe a renal biopsy

**Week 2**

**Topics**

C. Infectious Disease
   a. HIV Management
   b. Fever of Unknown Origin
   c. Nosocomial
   d. SIRS/Shock

D. Gastroenterology /Hepatology
   a. GI Bleed
   b. Biliary Tract Disorder

**Specific Learning Objectives**

**HIV Management**
- Utilize the CDC’s criteria to diagnose AIDS
- Describe relationship between the CD4 lymphocyte count and risk of opportunistic infections
- Recognize common HIV-associated infections

**Fever of Unknown Origin**
- Distinguish between common etiologies of fever of unknown origin

**Nosocomial**
- List Risk Factors for and precautions against the acquisition of nosocomial infection.
- Learn system-based practices to prevent health-care associated infections such as catheter-related infections, urinary tract infections and ventilator-associated pneumonia

**SIRS/Shock**
- Compare and contrast the signs and symptoms of the four classifications of shock
- Manage the appropriate interventions for the patient in shock
GI Bleed
- Define hematemesis, melena and hematochezia
- Explain the role of contributing factors in gastrointestinal bleeding such as H. pylori, NSAIDS, alcohol, coagulopathies and chronic liver disease.
- Discuss the common causes for and symptoms of lower/upper gastrointestinal blood loss
- List elements of physical exam in patient with suspected GI bleed

Biliary Tract Disorder
- Describe the complications of gallstones including acute cholecystitis, choledocholithiasis and Mirizzi syndrome.
- List common biliary tract neoplasm’s

Module C and D Assignment
1. Case Presentation on Fever of Unknown Origin Module (see D2L)
2. HIV Reading Assignment
   a. MKSAP for Students 5 Digital : Infectious Disease Medicine; Human Immunodeficiency Virus Infection
   b. Harrison’s Internal Medicine : Part 6 Infectious Disease Section 14 Infections Due to Human Immunodeficiency Virus and other Human Retroviruses 173 pg 1076
   d. www.cdc.org
3. Nosocomial Reading Assignment
   a. MKSAP for Students 5 Digital : Infectious Disease Medicine ; Health Care-Associated Infections
   b. Harrison’s Internal Medicine : Part 6 Infectious Diseases Section 3 Clinical Syndromes: Nosocomial Infections 116 Hospital-Acquired Infections pg 775
4. SIR/Shock Ref Sheet (see D2L)
5. Case Presentation on Upper and Lower GI Bleed Module (see D2L)
6. Biliary Tract Disease Ref Sheet (see D2L)

Module Activity C and D: observe a tagged WBC scan/Fluorine-18 fluorodeoxyglucose positron emission tomography (18F-FDG PET) observe an EGD and colonoscopy (or watch Access Surgery Multimedia Resources Colorectal Colonoscopy)

Week 3

Topics
E. Pulmonary
   a. Diffuse Parenchymal Lung Disease
   b. ARDS
   c. Acute Respiratory Failure /Ventilator management

F. Hematology /Oncology
   a. Hematology Slides
   b. Common Cancers
i. Lung, Breast, Prostate, Colon

c. Leukemia
d. Thrombocytopenia

**Specific Learning Objectives**

**Diffuse Parenchymal Lung Disease**

- Utilize the most common classification scheme for diffuse parenchymal lung disease
- Identify the diagnostic approach and evaluation necessary to diagnosis DPLDs

**ARDS/Acute Respiratory Failure /Ventilator Management**

- Identify signs and symptoms of acute respiratory failure
- Identify acute respiratory distress syndrome
- Identify different forms of mechanical ventilation

**Anemia**

- Review slide morphology

**Common Cancers**

- Identify common cancers in the US including breast, prostate, lung and colon
- Identify environmental risk factors associated with cancer related deaths

**Leukemia**

- Know the common adult leukemia’s and their typical CBC findings

**Thrombocytopenia**

- Classify thrombocytopenia in terms of disease that cause decreased platelet production and accelerated platelet destruction.
- Define ITP in terms of cause and, lab testing and various treatment modalities depending on platelet counts
- Define Heparin induced thrombocytopenia
- Define thrombocytopenia purpura and the hemolytic syndrome in terms of associated disorders, clinical signs and symptoms, lab tests and treatment options.

**Module E and F Assignment**

1. Acute Respiratory Distress Syndrome Reading Assignment
   a. MKSAP for Students 5 Digital : Pulmonary Medicine, Approach to Dyspnea
   b. *Harrison’s Internal Medicine* : Part 10 Critical Care  Section 1 Respiratory Critical Care
      250 Acute Respiratory Distress Syndrome pg 159
   c. *John Hopkins Internal Medicine Board Review* : Chapter 23 Critical Care Medicine, Acute
      Respiratory Distress Syndrome pg 177-178.

2. Acute Respiratory Failure Case Module (see D2L)

3. Diffuse Parenchymal Lung Disease Ref Sheet (see D2L)

4. Hematology Slide Round Module (see D2L)

5. Leukemia Reading Assignment
   a. MKSAP for Students 5 Digital : Hematology; Common Leukemias
b. Harrison’s Internal Medicine : Part 5 Oncology and Hematology Section 2 Hematopoetic Disorders 96 Acute and Chronic Myeloid Leukemia pg 631.

6. Common Cancers Ref Sheet (see D2L)

7. Thrombocytopenia Reading Assignment
   a. MKSAP for Students 5 Digital : Hematology; Thrombocytopenia
   b. Harrison’s Internal Medicine : Part 5 Oncology and Hematology Section 3 Disorders of Hemostasis 101 Disorders of the Platelet and Vessel Wall pg 673.

Module Activity E and F: assistant respiratory team during respiratory failed patient (or review NEJM link to videos in clinical medicine); observe bone marrow biopsy (or review on NEJM link to videos in clinical medicine)

Week 4

Topics

G. Procedures
   a. Central Line
   b. Arterial Line
   c. ABG’s
   d. Thoracentesis/Pleural Disease

Specific Learning Objectives

Procedure Objectives

- Describe the anatomic landmarks and approach for internal jugular, subclavian and femoral vein catheterization
- Demonstrate safe and sterile placement of central venous catheters
- Know the indications and contraindications for central line placement
- Know how to avoid complications such as hematoma, pneumothorax and infection when placing a central line
- Describe the anatomic landmarks and approach for arterial line placement
- Demonstrate safe and sterile placement of arterial lines
- Know the indications for arterial line placement
- Know how to avoid complications
- Demonstrate safe and sterile techniques
- Know how to avoid complications
- Describe the anatomic landmarks and approach for sampling arterial blood gas
- Know the indications for obtaining arterial blood vs venous
- Describe the anatomic landmarks and approach for thoracentesis
- Know the indications and contraindications
Module G Assignment

1. Review NEJM videos and articles on NEJM link to videos in clinical medicine

Module G Activity: Perform the above procedures during this month when applicable.
**Student Responsibilities**

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 fourth 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 physical’s 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 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 should be worn, with your ID badge worn above the waist.

**Infection Control Guideline**

**Universal Precautions:**

- Consider all blood, visibly bloody secretions, genital secretions, and all bodily fluids from ALL PATIENTS to be 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 un gloved 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 (see “Exposure Incidents Report” on page 22 of the syllabus).
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.
### IM-660 Sub-I Rotation Academic Grading Requirements

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Submission Method</th>
<th>Due Date</th>
<th>Grade Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 Modules</td>
<td>D2L</td>
<td>11pm Sunday after first week</td>
<td>25%</td>
</tr>
<tr>
<td>Week 2 Modules</td>
<td>D2L</td>
<td>11pm Sunday after second week</td>
<td>25%</td>
</tr>
<tr>
<td>Week 3 Modules</td>
<td>D2L</td>
<td>11pm Sunday after third week</td>
<td>25%</td>
</tr>
<tr>
<td>Week 4 Module</td>
<td>D2L</td>
<td>End of rotation last day of clerkship</td>
<td>25%</td>
</tr>
</tbody>
</table>

You must achieve an 80% average on the above modules to satisfactorily complete this portion of the rotation.

**COMAT Exam**

Schedule for last Friday of the last rotation of IM658 or IM660, as per MSU COM instructions. However, successful completion will be tied to the IM 660 grade. Complete with score $\geq 1$ SD from the mean of the exam that you take to receive a passing grade. One retake will be allowed before the student will be required to repeat the IM 660 rotation.

Failure to complete the above will result in an N grade being issued for IM 660

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**IM 660 Corrective Action Process for Deficient Academic Requirements**

If a student does not successfully complete the academic requirements of the course, the student will be permitted to go through a “Corrective Action” process.

The steps of the “Corrective Action” process for IM 650 Internal Medicine Core Rotation #1 Inpatient are as follows:

1) The student who fails to achieve an 80% overall average on the weekly quizzes 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) The student who fails to turn in required paperwork, who has a verifiable reason why they failed to do so, will be allowed a 2 week grace period or more depending on the circumstances, at which time the student will be referred to the Committee on Clerkship Performance for Professionalism issues. All others will be referred to the Committee on Clerkship Performance for Professionalism issues.
3) The student must complete the COMAT exam at the next available scheduled time after completion of the third IM rotation. If this is not IM 660 then the grade for IM 660 will remain ET until the final rotation is completed and the exam is taken.

If a student completes the corrective action successfully, as determined by the Instructor of Record, the student will receive credit for the deficient academic grading requirement(s).

If a student does not complete the corrective action successfully, as determined by the Instructor of Record, the student will receive an “N” grade for the course.

<table>
<thead>
<tr>
<th>IM-660 Sub-I Rotation Clinical Grading Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Requirements</strong></td>
</tr>
<tr>
<td>Attending Evaluation of your Performance on Rotation</td>
</tr>
<tr>
<td>Student Evaluation of Rotation</td>
</tr>
</tbody>
</table>

**Failure to complete the above will result in an N grade being issued for IM 660**

**Unsatisfactory Clinical Performance**

A student’s clinical performance will be assessed through the Attending Evaluation. A satisfactory Attending Evaluation is required for completion of the clinical requirements for the course.

Unsatisfactory Attending Evaluations are governed by the Policy for Retention, Promotion and Graduation. Evaluations with below average scores in two or more categories defined as rankings of Needs Improvement/Unsatisfactory (on a scale of Needs Improvement/Unsatisfactory-Exceptional) or 3 and below (on a numerical scale of 1-7) will be referred to the Department Chairperson/Instructor of Record for review and grade determination.

Any student with marginal evaluations in two or more rotations will be referred to the COSE Clerkship Performance Subcommittee for review.

**IMPORTANT NOTE:** The student will maintain an “Extended” (ET) grade until they have successfully completed all academic and clinical requirements for the course.
**“N” Grade and Remediation**

http://com.msu.edu/Students/Policies_and_Programs/Remediation_Policy.htm

A student who receives an “N” grade will be required to appear before the Committee on Student Evaluation (COSE) Clerkship Performance Subcommittee for review of the student's overall performance. The Subcommittee may recommend that the student who has received an "N" grade be permitted to remediate the “N” grade (see below) or academically dismissed. If a student is recommended for dismissal, the student will appear before COSE to have their status in MSUCOM determined. COSE will review the student’s academic/clinical performance; determine whether dismissal is appropriate or if the student’s circumstances warrant an opportunity for continuation in the curriculum. The student’s eligibility to remediate will be determined following this COSE decision.

Remediation is the method by which course objectives will be met after receiving an "N" grade. Remediation will be offered only after the student’s eligibility for remediation has been determined.

To successfully remediate an “N” grade, a student must demonstrate mastery of the course objectives. To do this the student may be required to retake the course or enroll and participate in a College directed study course demonstrating successful mastery of the course objectives.

Upon remediation of the “N” grade, the original “N” grade remains on the permanent transcript along with the grade, “P” or “N,” for the remediation experience.

**IM 660 Rotation Remediation**

For any student who receives an N grade in IM 660 and completes the COSE process indicated above, the following remediation plan will go into immediate effect:

1) The student will be required to meet with the Clerkship Performance Committee to determine eligibility to continue in the curriculum.
2) The student will be required to correctly answer incorrect module questions in short essay style answers and submit to the department chair for review.
3) The student will be required to provide a summation essay of no less than 2 pages discussing a current evidence based article on the module subject matter. This will be reviewed by the Chair of the Department as well for evaluation.
4) The student will be required to complete any requirements made by the Clerkship Performance Committee
5) Upon successful completion of the above, the student will be given a passing grade for the course.
6) If the student fails the rotation for other reasons (poor performance in the eyes of the internist and/or Director of Medical Education), the student will be subject to an alternate remediation plan designed by the Director of Medical Education in conjunction with the Dean of Student Services and Clinical Curriculum Director, in conjunction with the instructor of record.
IM 660 In-Patient Internal Medicine 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:

1) Osteopathic Principles and Practice
   a. Approach the patient with recognition of the entire clinical context, including mind-body and psychosocial interrelationships
   b. Diagnose clinical conditions and plan patient care
   c. Perform or recommend OMT as part of a treatment plan
   d. Communicate and document treatment details

2) Medical Knowledge
   a. Articulate basic biomedical science and epidemiological and clinical science principles related to patient presentation

3) Patient Care
   a. Gather accurate data related to the patient encounter
   b. Develop a differential diagnosis appropriate to the context of the patient setting and findings
   c. Form a patient-centered, inter-professional, evidence-based management plan
   d. Health promotion and disease prevention (HPDP)
   e. Documentation, case presentation, and team communication

4) Interpersonal and Communication Skills
   a. Establish and maintain the physician-patient relationship
   b. Demonstrate effective written and electronic communication in dealing with patients and other health care professionals
   c. Work effectively with other health professionals as a member or leader of a health care team

5) Professionalism
   a. Demonstrate humanistic behavior, including respect, compassion, honesty, and trustworthiness
   b. Demonstrate accountability to patients, society, and the profession, including the duty to act in response to the knowledge of professional behavior of others
   c. 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
   a. Describe the clinical significance of and apply strategies for integrating research evidence into clinical practice
   b. Critically evaluate medical information and its sources, and apply such information appropriately to decisions relating to patient care

7) Systems-Based Practice
   a. Demonstrate understanding of how patient care and professional practices affect other health care professionals, health care organizations, and society
   b. Identify and utilize effective strategies for assessing patients
**MSUCOM Clinical Expectations**

- 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.

**Internal Medicine COMAT Exam Information**

**EXAM PREPARATION**

This is the final of your three internal medicine rotations and every effort has been made to expose you to the general principles of internal medicine. You will need to study and prepare throughout the month for the end of rotation COMAT exam. Please review information from IM 650 and IM 658 as well as other study materials prior to completion of the exam.

Students always wish to know ‘What is the best way to prepare for an exam?’ The short and simple answer is STUDY APPROPRIATE CONTENT REGULARLY. Doing so will likely increase your ability to pass any testing elements you may encounter during your training, but also help you to develop good habits in the pursuit of becoming an effective ‘lifelong learner’. This is the ideal every physician strives for, as should you.

‘Appropriate content’ is harder to define – in the case of the Internal Medicine National Board of Osteopathic Medical Examiners’ (NBOME) Comprehensive Osteopathic Medical Achievement Test (COMAT) exam, which serves as a summative testing element for core rotations in Internal Medicine, the NBOME has provided a list of recommended areas of concentration covering specific dimensions of knowledge (Patient Presentation and Physician Tasks) as well as general and specific learner objectives. In addition, the NBOME provides recommended resources for learning as well as practice examinations. All of these elements may be accessed at the NBOME website (http://www.nbome.org/comat-fm.asp?m=can).

The curriculum provided as part of this course is designed to support your preparation for the COMAT exam, but it is by no means comprehensive and should NOT serve as your only learning resource for preparing for this exam. While designed to aid in studying for COMAT testing, it has multiple goals that extend beyond COMAT testing performance. The COMAT exam will not be taken until all three IM rotations have been completed (IM 650, IM 658, IM 660).

**EXAM ADMINISTRATION**

THE Internal Medicine NBOME COMAT EXAM: All students are required to take the NBOME subject COMAT examination in Internal Medicine in order to receive a “Pass” grade for IM660 rotation. Students must take the exam on the last Friday of the last IM rotation, ideally IM 660, but in some cases IM658 rotation. For exam dates/times, please refer to the COMAT Exam Schedule on the Academic Programs website at http://com.msu.edu/AP/clerkship_program/top_page_links_clerkship/comat_exam_protocol.htm.. The exam is offered on the Michigan State University campus, the DMC, and Macomb University Center. Western Michigan University School of Medicine, Mercy General, Munson Medical Center, McLaren Bay Regional Medical Center, and
Lakeland Healthcare will administer exams only for students based at their hospital. The exams are 2½ hours in length and contain 125 questions.

Additional information is available at [http://com.msu.edu/AP/clerkship_program/syllabus/core_syllabus/comat_exam_protocol_2013.10.01.pdf](http://com.msu.edu/AP/clerkship_program/syllabus/core_syllabus/comat_exam_protocol_2013.10.01.pdf). Contact Ms. Evita Gilbert (517-432-5423 / gilber10@msu.edu) with questions.

**EXAM SCORING**

The NBOME sends scores two- three weeks after the exam. E-mail notification is sent to the class when the scores have been entered on the student’s individual clerkship schedule.

COMAT exam scores reported by the NBOME are reported as standard scores.

The respective departmental chairs and course faculty will evaluate individual student performance on the online COMAT examination relative to overall performance of the national cohort. Students identified as scoring below the 20th percentile on a COMAT exam will be notified by the respective department.

The exams are offered as an opportunity to prepare for the NBOME licensure exam. Students performing poorly may anticipate similar results and possible failure of their licensure exam. Further study and review is encouraged.

**EXAM ATTENDANCE**

Recognizing that the college’s current resources for the administration of online exams are limited, students will be asked to commit to a specific exam location and scheduled exam time substantially before the scheduled exam date. Due to the substantial teamwork that is needed to scheduling COMAT exams among college and NBOME staff, students cannot make late, last minute changes in these schedules.
MSU College of Osteopathic Medicine Standard Policies

The following are the standard MSUCOM policies students must adhere to across rotations.

ATTENDANCE POLICY

Attendance at all scheduled Clerkship activities is mandatory.

If a student is unable to be present for a scheduled clerkship activity because of extenuating circumstances, the student is required to complete a Clerkship Excused Absence Request form. In all cases except for emergencies or sudden illness, requests for scheduled absences are to be submitted at least 30 days prior to the date(s) of absence. Absences are not approved until the form is completed with all required signatures. Once approved, the student is required to notify their preceptor of their absence within 24 hours. Failure to complete this form or obtain required signatures will result in an unexcused absence from the rotation. Unexcused absences are considered unprofessional behavior and could be noted as a mark of unprofessionalism on the student’s performance evaluation, and may lead to failure of the rotation.

An absence request for the first or last day of the rotation will be denied. All absences (excused or unexcused) must be made up as specified on the Excused Absence Form as outlined under the conditions of approval. Makeup experience will be determined by the Director of Medical Education and may include additional clinical day(s) or written assignment(s).

If a student has an emergency or sudden illness they should immediately notify the Director of Medical Education and rotation preceptor. The excused absence request form must be submitted to the Medical Education Office within 24 hours of the original emergency or sudden illness notification.

IMPORTANT NOTE: The only exception to this attendance policy is Emergency Medicine, where attendance is based on a shift schedule assigned by the hospital. Please refer to the Emergency Medicine “Introduction and Overview” for more information.

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 are 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.

STUDENTS 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.
FACULTY RESPONSIBILITIES

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 must also generally adhere to a 60 hour work week limit for students on any given rotation. Both faculty and students are to be treated fairly and professionally in order to maintain a proper working relationship between trainer and trainee.

COURSE GRADES

- **P-Pass** – means that credit is granted and that the student achieved a level of performance judged to be satisfactory according to didactic and clinical performance by the department.
- **N-No Grade** – means that no credit is granted and that the student did not achieve a level of performance judged to be satisfactory to be satisfactory according to didactic and clinical performance by the department.
- **ET-Extended Grade** – means that a final grade (“Pass” or “No Grade”) cannot be determined due to one or more missing course requirements. In Years 3 and 4, the ET grade is used instead of an “Incomplete (I)” grade. Once all course requirements have been completed, received, and processed, the ET grade will be changed to a final grade. An “ET” will NOT remain on a student’s transcript.

ROTATION EVALUATIONS

**Attending/Faculty/ Resident 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 assertively 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. Note that the clinical supervisor and the DME from the rotation hospital are required to sign the form.

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 Office of Student Services. It is important to know that evaluations will not be accepted by the Office of Student Services if submitted by the student. Any evidence of tampering or modification while in the possession of the student will be considered “unprofessional behavior” resulting in an “N” grade and review by the Committee on Student Evaluation (COSE) and/or the College Hearing Committee.

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

**Student Evaluation of Rotation**

Students will submit their rotation evaluations electronically at the conclusion of every rotation by accessing their online schedule through Kobiljak.

EXPOSURE INCIDENTS PROTOCOL

A form has been developed by the University to report exposure incidents. These forms will be on file in your DME’s office. You can also access the form at [www.com.msu.edu/AP/clerkship_program/clerkship_documents/exposure.pdf](http://www.com.msu.edu/AP/clerkship_program/clerkship_documents/exposure.pdf). Please make yourself familiar with the procedure and the form.
LOCAL HOSPITAL REQUIREMENTS
(To be defined and evaluated by individual hospitals)