Clinical Clerkship Syllabus

GENERAL INFORMATION

Course Name: Internal Medicine Clerkship
Graduating Class Year: DO 2021
Discipline: Clinical
Course Option Type: Required
Grade Scheme: Pass / Fail
Department: Family & Internal Medicine Department (FIM)
Credit Hours: 4
Duration: 4 weeks
Dates: August 5, 2019-May 15, 2020

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Director</td>
<td>Alan Hilgerson, DO</td>
<td><a href="mailto:ahilgerson@broadlawns.org">ahilgerson@broadlawns.org</a></td>
<td>515-282-5677</td>
</tr>
<tr>
<td>Co-Director</td>
<td>Steven Harder, DO</td>
<td><a href="mailto:Steven.Harder@dmu.edu">Steven.Harder@dmu.edu</a></td>
<td>515-271-1642</td>
</tr>
<tr>
<td></td>
<td>Interim Chair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Assistant</td>
<td>Denise McGee</td>
<td><a href="mailto:Denise.Mcgee@dmu.edu">Denise.Mcgee@dmu.edu</a></td>
<td>515-271-1490</td>
</tr>
</tbody>
</table>

GENERAL COURSE DESCRIPTION

This required rotation is a four (4) week introductory, structured clinical clerkship under direct supervision designed to provide experience in diagnosing, treating and caring for adult patients.

Clinical experiences are intended to assist the student’s transition from didactic to integrated clinical evaluation and patient management. In addition to gaining specific skills, the student should also develop skills in systematic medical problem-solving and patient management abilities; establish or reinforce patterns of independent learning and self-evaluation; and advance verbal and written clinical communication skills. The student should also develop fundamental psychomotor skills by performing routine basic procedures under direct supervision.

The College of Osteopathic Medicine, Department of Family & Internal Medicine will administer a post-rotation examination when the student has completed the required internal medicine rotation. Please refer to the section on Post-Rotation Examination and the Desire2Learn (D2L) site, 19/YR OSTE 3103NC DO 21 INTERNAL MEDICINE CLERKSHIP.
## AOA COMPETENCIES AND COURSE SCHEDULE

The table below defines each of the seven competency domains set forth by the AOA.

<table>
<thead>
<tr>
<th>AOA Core Competencies</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Osteopathic Principles and Practices</td>
<td>Students will provide osteopathic care to patients that supports the promotion of health and delivery of compassionate, appropriate, and effective treatment of disease based on patient information and preferences, evidence-based medicine, and clinical judgment.</td>
</tr>
<tr>
<td>II. Medical Knowledge</td>
<td>Students will demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and psychosocial/behavioral concepts and their application to patient-centered care.</td>
</tr>
<tr>
<td>III. Patient Care</td>
<td>Students will demonstrate best practices in the delivery of patient-centered care with respect to data gathering and documentation, determination of differential diagnoses and treatment planning, implementation of clinical procedures, and the provision of clinical services consistent with health promotion and disease prevention.</td>
</tr>
<tr>
<td>IV. Interpersonal and Communication Skills</td>
<td>Students will demonstrate effective listening, speaking, writing, and nonverbal communication skills with patients or other members of the health care and academic environment.</td>
</tr>
<tr>
<td>V. Professionalism</td>
<td>Students will conduct themselves with poise, courtesy, honesty and responsibility when dealing with patients or other members of the health care and academic environment. Students will engage in self-care and regulation in order to maintain a productive career in medicine.</td>
</tr>
<tr>
<td>VI. Practice-Based Learning and Improvement</td>
<td>Students will appraise, assimilate, and apply scientific evidence to the care of their patients. They will engage in self-evaluation and life-long learning to ensure optimal patient outcomes.</td>
</tr>
<tr>
<td>VII. Systems-Based Practice</td>
<td>Students will demonstrate a knowledge of health care systems and the resources available to provide comprehensive quality patient care and processes to deal with impediments to patient safety, quality, and access to care.</td>
</tr>
</tbody>
</table>

This course assesses associated AOA competencies and sub-competencies as noted in the table below.
### COURSE GOALS, OUTCOMES & COMPETENCIES

The goals of this course are to develop a general competency regarding Outpatient and/or Inpatient Internal Medicine practice. We wish for each student to develop a core knowledge of general disease processes and to observe and participate in the coordination of adult patient medical care.

<table>
<thead>
<tr>
<th>Learning Outcome</th>
<th>AOA/AACOM Competencies</th>
<th>EPAs</th>
<th>Instructional Methods</th>
<th>Assessment Methods</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - Formulate a reasoned differential diagnosis for each problem.</td>
<td>I.4.g II.3.a II.3.c II.3.d III.1.g III.1.k III.2.a III.2.b III.2.c III.6.e IV.1.b</td>
<td>2, 3</td>
<td>Clinical Experience - Ambulatory Clinical Experience - Inpatient Patient Presentation - Learner Preceptorship Self-Directed Learning Ward Rounds</td>
<td>Clinical Performance Rating/Checklist Exam - Nationally Normed/Standardized, Subject Oral Patient Presentation</td>
<td>Real Patient</td>
</tr>
<tr>
<td>Learning Outcome</td>
<td>AOA/AACOM Competencies</td>
<td>EPAs</td>
<td>Instructional Methods</td>
<td>Assessment Methods</td>
<td>Resources</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------</td>
<td>------</td>
<td>-----------------------</td>
<td>--------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>5 - Formulate an appropriate initial and ongoing treatment program taking into account the urgency of the patient’s problems.</td>
<td>I.2.a  I.2.c III.4.g III.4.h III.4.i III.4.j III.4.k III.4.l IV.1.h IV.2.g IV.2.h V.1.e VII.5.a</td>
<td>4, 7, 10</td>
<td>Clinical Experience - Ambulatory Clinical Experience - Inpatient Patient Presentation - Learner Preceptorship Self-Directed Learning Ward Rounds</td>
<td>Clinical Performance Rating/Checklist Exam - Nationally Normed/Standardized, Subject Oral Patient Presentation</td>
<td>Real Patient</td>
</tr>
<tr>
<td>6 - Use knowledge of the pathophysiology of signs and symptoms to establish clinical correlation with disease processes.</td>
<td>II.2.a II.2.b II.2.c II.2.d II.3.a II.3.b II.3.c II.3.d II.3.e II.3.f II.3.g</td>
<td>2, 3</td>
<td>Clinical Experience - Ambulatory Clinical Experience - Inpatient Preceptorship Self-Directed Learning</td>
<td>Exam - Nationally Normed/Standardized, Subject</td>
<td>Real Patient</td>
</tr>
<tr>
<td>7 - Use information from texts, syllabi, and journals to study general topics related to patient’s problems.</td>
<td>II.2.d III.4.a III.4.b VI.2.b VI.2.c VI.4.c</td>
<td>7</td>
<td>Independent Learning Preceptorship Self-Directed Learning</td>
<td>Oral Patient Presentation Participation</td>
<td>Real Patient, Printed Materials, Searchable Electronic Database</td>
</tr>
<tr>
<td>Learning Outcome</td>
<td>AOA/AACOM Competencies</td>
<td>EPAs</td>
<td>Instructional Methods</td>
<td>Assessment Methods</td>
<td>Resources</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>------</td>
<td>-----------------------</td>
<td>--------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>8 - Record patient progress in the medical record; and make a verbal report to the healthcare team in a clear and succinct manner.</td>
<td>II.3.a II.3.b II.3.c II.3.d II.3.e II.3.f II.3.g II.3.h II.3.i</td>
<td>5, 6</td>
<td>Clinical Experience - Ambulatory Clinical Experience - Inpatient Patient Presentation - Learner Preceptorship</td>
<td>Clinical Performance Rating/Checklist Oral Patient Presentation Participation</td>
<td>Real Patient, EMR</td>
</tr>
<tr>
<td>9 - Communicate in a respectful, effective, efficient, and educational manner with patients and their families.</td>
<td>IV.1.a IV.1.b IV.1.c IV.1.d IV.1.e IV.1.f IV.1.g IV.1.h IV.1.i IV.1.j IV.1.k IV.1.l IV.1.m IV.1.n</td>
<td>6, 11</td>
<td>Clinical Experience - Ambulatory Clinical Experience - Inpatient Patient Presentation - Learner Preceptorship</td>
<td>Clinical Performance Rating/Checklist Oral Patient Presentation Participation</td>
<td>Real Patient</td>
</tr>
<tr>
<td>10 - Order and appropriately interpret the results of commonly used diagnostic procedures. These may include but are not limited to: • perform and interpret an ECG. • perform venipuncture for blood specimens or intravenous therapy • interpret a complete blood count. • interpret common chemistry measurements (e.g. enzymes, electrolytes). • interpret arterial blood gas measurements. • interpret results of a urinalysis.</td>
<td>I.1.c I.1.d I.1.e I.1.f I.1.g I.1.h I.1.i I.1.j I.1.k I.1.l I.1.m I.1.n</td>
<td>2, 5</td>
<td>Clinical Experience - Ambulatory Clinical Experience - Inpatient Preceptorship Self-Directed Learning Ward Rounds</td>
<td>Clinical Performance Rating/Checklist Exam - Nationally Normed/Standardized, Subject</td>
<td>Real Patient, EMR</td>
</tr>
<tr>
<td>Learning Outcome</td>
<td>AOA/AACOM Competencies</td>
<td>EPAs</td>
<td>Instructional Methods</td>
<td>Assessment Methods</td>
<td>Resources</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------</td>
<td>------</td>
<td>-----------------------</td>
<td>--------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>• interpret chest x-ray findings. • do basic interpretation of pulmonary function tests.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Content Mapping:**

<table>
<thead>
<tr>
<th>Organ System</th>
<th>Scientific Understanding of Health &amp; Disease Mechanisms</th>
<th>Health Care Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>Anatomy – normal/abnormal</td>
<td>Biostatistics</td>
</tr>
<tr>
<td>Digestive</td>
<td>Behavioral Health – normal/abnormal</td>
<td>Examination &amp; Recognition (includes neuro musculoskeletal exam)</td>
</tr>
<tr>
<td>Endocrine</td>
<td>Biochemistry – normal/abnormal</td>
<td>Gathering patient information</td>
</tr>
<tr>
<td>Hematologic</td>
<td>Cell &amp; Tissue Biology – normal/abnormal</td>
<td>Health care system overview</td>
</tr>
<tr>
<td>Immune</td>
<td>Genetics – normal/abnormal</td>
<td>Information management &amp; technology</td>
</tr>
<tr>
<td>Integumentary</td>
<td>Immunology – normal/abnormal</td>
<td>Medical ethics &amp; medical professionalism</td>
</tr>
<tr>
<td>Lymphatic</td>
<td>Microbiology – normal/abnormal</td>
<td>Physician-patient communication</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>Molecular &amp; Cell Biology – normal/abnormal</td>
<td>Population-based care</td>
</tr>
<tr>
<td>Nervous, including sensory</td>
<td>Neurology – normal/abnormal</td>
<td>Practice management</td>
</tr>
<tr>
<td>Respiratory</td>
<td>Osteopathic principles – normal, homeostasis</td>
<td>Teamwork &amp; collaboration</td>
</tr>
<tr>
<td>Urinary/Excretory</td>
<td>Osteopathic principles – somatic &amp; visceral dysfunction</td>
<td>Pathology</td>
</tr>
<tr>
<td></td>
<td>Pharmacology – normal/abnormal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physiology – normal/abnormal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Psychiatry – normal/abnormal</td>
<td></td>
</tr>
</tbody>
</table>
**Patient Conditions:** To ensure a comparable and quality experience while on clerkship, rotations may have a list of patient conditions that students must encounter during the experience. Students document exposure to these conditions through patient encounter logging (please see case log section below). If a student does not meet the minimum exposure to a condition, an assignment in the form of a video, module, or reading assignment will be available to the student. Below are the patient conditions for this rotation:

<table>
<thead>
<tr>
<th>Patient Condition / Clinical Diagnoses</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma/Chronic Obstructive Pulmonary Disease*</td>
<td>Arterial line</td>
</tr>
<tr>
<td>Cardiac/Ischemic disease*</td>
<td>Central line</td>
</tr>
<tr>
<td>Congestive Heart Failure*</td>
<td>Lumbar puncture</td>
</tr>
<tr>
<td>Depression*</td>
<td>Paracentesis</td>
</tr>
<tr>
<td>Diabetes*</td>
<td>Thoracentesis</td>
</tr>
<tr>
<td>Gastroenteritis*</td>
<td></td>
</tr>
<tr>
<td>Hepatic cirrhosis*</td>
<td></td>
</tr>
<tr>
<td>Hypertension*</td>
<td></td>
</tr>
<tr>
<td>Pneumonia*</td>
<td></td>
</tr>
<tr>
<td>Renal Failure*</td>
<td></td>
</tr>
<tr>
<td>Substance-related and addictive disorders*</td>
<td></td>
</tr>
<tr>
<td>Genitourinary Tract Infection*</td>
<td></td>
</tr>
</tbody>
</table>

*Indicates a core, peer-reviewed diagnosis
STUDENT RESPONSIBILITIES

Formative Assessment
Students are required to request mid rotation feedback from their preceptor and implement at least one of the suggested changes. At the conclusion of the rotation, the student will be required to write a short summary of what change they made and how it enhanced their education. This will occur on the site evaluation and is required for passing the rotation. Students who encounter barriers in obtaining their mid-rotation feedback should notify the clerkship director within one week.

Case Logs
One of the mechanisms for monitoring a student’s progress, patient load, rotation experience and competency achievement is through the student’s case logs.

Students on every clinical rotation are expected to:

- Complete a daily log of all patient encounters
- Each patient encounter requires a diagnosis
- While all patient encounters should be logged, a minimum of 60 patient encounters logged for each four-week rotation is expected. If a student is at a low volume rotation, their clerkship coordinator should be notified by the halfway point of the rotation.
- Students must log non-clinical activities such as residency interviews, board exams, research, didactic activities and absences.
- If internet access is limited such as, while a student is on international rotation, paper logs must be submitted within 7 days of returning to the United States. Logs may be submitted either in person or scanned and provided via email.
- Entries will not be allowed in the system after seven days after the encounter occurred. Prompt entry of patient encounters is highly encouraged.
- Students that have technical difficulties submitting logs may contact the Help Desk at 515-271-1522 for assistance. Students must also notify their clerkship coordinator of logging difficulties.
- Students not in compliance with the case log policy will not be eligible for high pass or honors for that rotation.

Site and Preceptor Evaluation
Students are required to complete the site evaluation by the Monday morning after the rotation ends.

RESOURCES REQUIRED FOR LEARNING

Recommended Textbooks/eResources

Electronic Resources
NOTE: (All are available through library section of PULSE)

EVIDENCE-BASED MEDICINE:
• **Cochrane Library for Evidence-Based Medicine**- The Cochrane Library contains high-quality, independent evidence to inform healthcare decision-making.
• **UpToDate®**- an evidence-based knowledge system authored by physicians to help clinicians make the right decisions at the point of care. All UpToDate content is written and edited by a global community of 4,800 physicians, world-renowned experts in their specialties.

ELECTRONIC TEXTS:
• **Goldman-Cecil Medicine** - Library Catalog
• **Harrison’s Principles of Internal Medicine** - Library Catalog
• **Current Medical Diagnosis and Treatment 2019** – Library Catalog
• **eJournals - Full Text Finder** - Database provides link and coverage information to every ejournal the Library licenses.

ADDITIONAL RESOURCES:
• **Primer to the Internal Medicine Clerkship** (accessed 1/30/2019)
• **Introduction to the Internal Medicine Clerkship** (Section 1, pp. 3-54) in Paauw’s guide. This section provides a very helpful review of day-to-day inpatient and outpatient skills, communications, and ethics. Practical skills include how to read EKGs, abdominal and chest films; perform basic procedures and body fluid analysis and the use of antibiotics.
• **The COMAT-Internal Medicine Assessment Objectives, Blueprint, and Practice Examination** The section **Selected Specific Objectives for COMAT-Internal Medicine** lists areas that may be tested in COMAT.

*Updated January 2019*
READING ASSIGNMENTS

Core Diseases and Topics
The Department of Internal Medicine recommends the student review the below listed core
diseases and topics in the resources noted above.

1. **Cardiovascular**
   a) Ischemic heart disease
   b) Congestive heart failure
   c) Hyperlipidemia
   d) Common cardiac arrhythmias

2. **Endocrinology**
   a) Diabetes mellitus
   b) Thyroid disease

3. **Gastroenterology**
   a) Gastrointestinal bleeding
   b) Hepatobiliary and pancreatic disease

4. **Hematology/Oncology**
   a) Common cancers

5. **Infectious Disease**
   a) HIV infection and complications

6. **Nephrology**
   a) Acute renal failure
   b) Acid-base disorders
   c) Fluid and electrolyte disorders
   d) Hypertension

7. **Neurology**
   a) Approach to altered mental state
   b) Stroke

8. **Pulmonary Medicine**
   a) Pneumonia
   b) COPD and asthma
   c) Venous thromboembolism

9. **Rheumatology**
   a) Common musculoskeletal complaints

10. **General Internal Medicine**
    a) Women’s health
Core Presentations
The Department of Medicine recommends the student review the below listed core presentations in the Harrison’s-Principles of Internal Medicine, 20th Ed., or Goldman-Cecil Medicine, 25th Ed.

- Abdominal pain
- Anemia
- Chest pain
- Cough
- Depression
- Dyspnea
- Dysuria
- Joint and muscle pain
- Low back pain

POST ROTATION EXAMINATION

Des Moines University Department of Family & Internal Medicine requires the completion of the NBOME-COMAT Internal Medicine subject examination with a passing standard score of 80 or greater. The NBOME-COMAT exam is a web-based exam administered by the NBOME and accessed via the NBOME website. A DMU approved proctor at your rotation site must proctor your exam. This exam will provide the student an opportunity to be informed of his or her progress nationally. The internal medicine post rotation exam must be taken on the Thursday or Friday of the last week of the required Internal Medicine rotation. The NBOME COMAT Internal Medicine subject examination consists of 125 test items, has a 2-hour and 30-minute time limit and a 5-minute tutorial prior to taking the exam. Please refer to the section on Desire2Learn (D2L) site, Internal Medicine Clerkship (DO-2021). The breakdown of topics for the post-rotation exam can be found at: https://www.nbome.org/exams-assessments/comat/clinical-subjects/comat-internal-medicine/.

A remediation COMAT Retake Exam will be available to those who fail the first COMAT Internal Medicine exam. The IM retake COMAT examination must be taken within 2 weeks of the date of notification of the initial failure. A standard score of 80 or greater is considered passing on the retake examination and a standard score of 80 will be reported to the office of Clinical Affairs. Failure to complete the retake exam within the specified time period will result in failure of the rotation.

Those failing the retake will be required to complete an Oral Remediation Exam conducted by the IM division faculty. The final exam grade will be determined by the Internal Medicine faculty members at the completion of the oral exam. For successful completion of the oral remediation exam, a grade of “pass” will be reported to the office of Clinical Affairs. Failure of the oral examination will result in failure of the rotation and the student will need to retake the Internal Medicine clinical rotation and retake the NBOME-COMAT IM post rotation examination.

Please refer to the COM Clerkship Syllabus Addendum at the end of this syllabus for more details regarding Post Rotation Examination.
APPENDIX

The curriculum detailed in the APPENDIX (adapted from the CDIM-SGIM Core Medicine Clerkship Curriculum Guide Ver.3.0) specifies course objectives in terms of the basic internal medicine core clinical competencies and the specific learning objectives (knowledge, skills, and attitudes) pertinent to those competencies. Every effort should be made to integrate them into the clerkship.
HISTORY-TAKING AND PHYSICAL EXAMINATION

Rationale:

The ability to obtain an accurate medical history and carefully perform a physical examination is fundamental to providing comprehensive care to adult patients. In particular, an internal medicine provider must be thorough and efficient in obtaining a history and performing a physical examination in a wide variety of adult patient populations. These include healthy adults, adults with both acute and chronic medical problems, as well as adults with complex life-threatening diseases, who come from diverse socioeconomic and cultural backgrounds.

Specific learning objectives:

A. **Knowledge:** Students should be able to define, describe, and analyze:
   1. The significant attributes of a symptom, including: location and radiation, intensity, quality, temporal sequence (onset, duration, frequency), alleviating, precipitating and aggravating factors, setting, associated symptoms, functional impairment, and patient’s interpretation of symptom. (i.e. OPQRST’s as taught in Physical Diagnosis) \((MK, \ OPP)\)
   2. The four methods of physical examination (inspection, auscultation, palpation, and percussion), including where and when to use them, their purposes, and the findings each can elicit. \((MK)\)
   3. The physiologic mechanisms that explain key findings in the history and physical exam. \((MK, \ OPP)\)

B. **Skills:** Students should be able to demonstrate specific skills, including:
   1. Eliciting the patient’s chief complaint as well as a complete list of the patient’s concerns. \((PC, \ CS)\)
   2. Obtaining a patient’s history in a logical, organized, and thorough manner, covering the history of present illness; past medical history; preventive health measures; social, family, and occupational history; and review of systems. \((PC)\)
   3. Demonstrating proper hygienic practices whenever examining a patient. \((PC)\)
   4. Performing a physical examination in a logical, organized, respectful, and thorough manner, giving attention to the patient’s general appearance, vital signs, and pertinent body regions. \((PC)\)

C. **Attitudes and professional behaviors:** The student will:
   1. Recognize the essential contribution of a thorough history and physical examination to the formulation of a differential diagnosis. \((P)\)
   2. Develop the habit of updating historical information and reevaluating pertinent important parts of the physical examination during follow-up visits. \((P)\)
   3. Demonstrate consideration for the patient’s feelings, limitations, cultural and social background at all times, but particularly during the intimate act of taking a medical history and performing a physical exam. \((P)\)

AOA Competencies:

- PC = Patient Care
- MK = Medical Knowledge
- PLI = Practice-Based Learning and Improvement
- OPP = Osteopathic Philosophy, Principles and Practice
- CS = Communication Skills
- P = Professionalism
- SBP = Systems-Based Practice
INTERPRETATION OF CLINICAL INFORMATION

Rationale:

In the routine course of clinical practice, physicians order and interpret a wide variety of diagnostic tests and procedures. Understanding how to integrate these tests into clinical decision making and how to communicate the results to patients, colleagues, and attending physicians are core clinical skills that third-year medical students must develop.

Specific learning objectives:

A. Knowledge: Students should be able to:
   1. Identify which tests are ordered to evaluate patients presenting with common symptoms as well as to follow common diagnoses encountered in the practice of internal medicine. (PC, MK)
   2. Synthesize the results of these tests to rule in or rule out diagnosis from the list of differentials. (PC, MK)
   3. Recognize and summarize:
      • Indications for testing. (PC, MK)
      • Critical values that require immediate attention. (PC, MK)
   4. Independently interpret the results of the following laboratory tests:
      • CBC with diff and blood smear, UA, electrolytes, BUN/Cr, glucose, liver enzymes, viral hepatitis serologies, cardiac biomarkers (e.g. CK-MB, troponin), PT/INR, PTT, thyroid function tests, arterial blood gases, pulmonary function tests (PC, MK)

B. Skills: Students should be able to demonstrate specific skills, including:
   1. Interpreting a blood smear, Gram stain, and chest X-ray (PC)
   2. Approaching ECG interpretation in a systematic and logical fashion analyzing the following: rate, rhythm, P wave morphology, PR interval, QRS width, axis, voltage, QT interval, ST segment morphology, and T wave morphology. (PC)
   3. Recording the results of laboratory tests in an organized manner, using flow sheets when appropriate. (PC)

C. Attitudes and professional behaviors: Students will:
   1. Appreciate the importance of follow-up on all diagnostic tests and procedures and the role of timely and accurate communication of results to the delivery of patient care. (P)
   2. Personally review medical imaging studies, ECGs, Gram stains, blood smears, etc. to assess the accuracy and significance of the results. (P)

AOA Competencies:

PC = Patient Care
MK = Medical Knowledge
PLI = Practice-Based Learning and Improvement
OPP = Osteopathic Philosophy, Principles and Practice
CS = Communication Skills
P = Professionalism
SBP = Systems-Based Practice
DIAGNOSTIC DECISION-MAKING

Rationale:

Internal medicine physicians are responsible for directing and conducting the diagnostic evaluation of a broad range of patients, including those seeking advice on prevention and screening, diagnosis and management of acute and chronic illnesses including those with life-threatening conditions. In a time of escalating health care costs and rapidly proliferating use tests, medical students must learn how to perform safe, expeditious, and cost-effective diagnostic evaluations. This requires well-developed diagnostic decision-making skills that incorporate probability-based thinking.

Specific learning objectives:

A. Knowledge: Students should be able to define, describe, and analyze:
   1. Key history and physical examination findings pertinent to create a differential diagnosis. (MK, OPP)
   2. Information resources for determining diagnostic options for patients with common and uncommon medical problems. (MK, PLI)
   3. How critical pathways, practice guidelines, and appropriate use criteria are used to guide the ordering of diagnostic tests. (MK)

B. Skills: Students should demonstrate specific skills, including:
   1. Identifying problems with which a patient presents, appropriately synthesizing these into logical clinical syndromes. (PC)
   2. Triaging problems of highest priority. (PC)
   3. Formulating a differential diagnosis based on the findings from the history and physical examination. (PC, OPP)
   4. Using the differential diagnosis to help guide diagnostic test ordering and sequencing. (PC)

C. Attitudes and professional behaviors: Students will:
   1. Seek feedback regularly regarding diagnostic decision-making and respond appropriately (P)
   2. Recognize the importance of and demonstrate a commitment to the utilization of other health care professionals in diagnostic decision making. (P, SBP)

AOA Competencies:

PC = Patient Care
MK = Medical Knowledge
PLI = Practice-Based Learning and Improvement
OPP = Osteopathic Philosophy, Principles and Practice

CS = Communication Skills
P = Professionalism
SBP = Systems-Based Practice
THERAPEUTIC DECISION-MAKING

Rationale:

Internists are responsible for directing and coordinating the therapeutic management of patients with a wide variety of problems, including critically ill patients with complex medical problems and the chronically ill. To manage patients effectively, physicians need basic therapeutic decision-making skills that incorporate both pathophysiologic reasoning and evidence-based knowledge.

Specific learning objectives:

A. Knowledge: Students should be able to define, describe, and analyze:
   1. Information resources for determining medical and surgical treatment options for patients with common and uncommon medical problems. (MK)
   2. The use of critical pathways and clinical practice guidelines to help guide therapeutic decision making. (MK)
   3. Factors that alter the effects of medications, including drug interactions and compliance problems. (MK)
   4. Factors to consider in selecting a medication from within a class of medications. (MK)
   5. Factors to consider in monitoring a patient’s response to treatment, including potential adverse effects. (MK)
   6. Methods of monitoring therapy and how to communicate them in both written and oral form. (MK)

B. Skills: Students should be able to demonstrate specific skills, including:
   1. Formulating an initial therapeutic plan. (PC)
   2. Accessing and utilizing, when appropriate, information resources to help develop an appropriate and timely therapeutic plan. (PC, PLI)
   3. Writing prescriptions and inpatient orders safely and accurately. (PC)
   4. Counseling patients about how to take their medications and what to expect when doing so, including beneficial outcomes and potential adverse effects. (PC, CS)
   5. Monitoring response to therapy and adjusting the treatment plan as necessary. (PC)

C. Attitudes and professional behaviors: Students will:
   1. Involve the patient in the decision-making process, explaining the risks, benefits and alternatives to the treatment recommended. (CS, P)
   2. Respect patient’s informed choices, including the right to refuse treatment. (P)
   3. Recognize the importance of and demonstrate a commitment to the utilization of other healthcare professionals in therapeutic decision making. (P, SBP)

AOA Competencies:

PC = Patient Care  CS = Communication Skills
MK = Medical Knowledge  P = Professionalism
PLI = Practice-Based Learning and Improvement  SBP = Systems-Based Practice
OPP = Osteopathic Philosophy, Principles and Practice
CASE PRESENTATION SKILLS

Rationale:

Communicating patient care information to colleagues and other health care professionals is an essential skill regardless of specialty. Students should develop facility with different types of case presentations: written and oral, new patient and follow-up, inpatient and outpatient.

Specific learning objectives:

A. **Knowledge:** Students should be able to define, describe, and analyze components of comprehensive and abbreviated case presentations (oral and written) and settings appropriate for each. *(MK)*

B. **Skills:** Students should be able to demonstrate specific skills, including:

1. Prepare legible, comprehensive, and focused new or follow-up patient reports that include the following features as clinically appropriate:
   - Concise history of the present illness organized chronologically with minimal repetition, omission, or extraneous information, and including pertinent positives and negatives. *(PC, CS)*
   - A comprehensive physical examination with detail pertinent to the patient’s problem. *(PC, CS, OPP)*
   - A succinct, prioritized, and, where appropriate, complete list of all problems identified by the history and physical examination. *(PC, CS, OPP)*
   - A differential diagnosis for each problem (appropriate for the student’s level of training). *(PC, CS)*
   - A diagnostic and treatment plan for each problem (appropriate for the student’s level of training). *(PC, CS, OPP)*

2. Orally present a new or follow-up inpatient’s or outpatient’s case in a logical manner, chronologically developing the present illness, summarizing the pertinent positive and negative findings as well as the differential diagnosis and plans for further testing and treatment. *(PC, CS)*

C. **Attitudes and professional behaviors:** Students will:

1. Demonstrate ongoing commitment to improving case presentation skills by regularly seeking feedback on presentations and acting on the information. *(PLI, P)*
2. Accurately and objectively record and present all data. *(P)*

AOA Competencies:

PC = Patient Care  
MK = Medical Knowledge  
PLI = Practice-Based Learning and Improvement  
OPP = Osteopathic Philosophy, Principles and Practice  
CS = Communication Skills  
P = Professionalism  
SBP = Systems-Based Practice
COM Clerkship Syllabus Addendum

COURSE POLICIES

ATTENDANCE
The educational hours will be determined by the preceptor and must be in accordance with ACGME work hour guidelines. Educational time/hours include clinical time and required didactic activities. Minimum educational time for a 4-week rotation is 144 hours and maximum educational time on a 4-week rotation is 240 hours. If a student is scheduled by the preceptor for less than the minimum of 144 hours of educational time, the student may learn from another preceptor, which would preferably be a physician but could be a physician assistant, nurse practitioner, certified nurse anesthetist, radiology technician, as long as this makes up no more than 25% of total rotation hours. If no other preceptors are available, the student must notify their clerkship coordinator as soon as possible to arrange for more clinical time elsewhere or an assignment.

The link to the ACGME Common Program Requirements, which addresses duty hours, is https://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRResidency2019.pdf.

ABSENCE POLICY

Absences: Students may miss rotation time for several reasons, which may include illness, residency interviews, and educational conferences/absences. Regardless of the reason for the absence, the following procedure applies.

For excused absences, students are allowed to miss a maximum of two days during a two-week rotation and four days during a four-week rotation. No more than two days will be approved for a single event or activity and students are not to miss more than two days in a single week. Planned absences requested over the first two days of the rotation will not be approved.

Students missing any time on their rotation must notify the following individuals as soon as possible:
- clinical site and preceptor
- site coordinator, and
- DMU clerkship coordinator.

If the absence is greater than two days and because of illness, students are required to provide their clerkship coordinator with a physician’s note. Notes from preceptors will not be accepted. The note must address the following:
- Documentation of the illness
- Documentation of the resolution of illness and release of the student back to duty.

Unexcused Absences: Absences are considered unexcused if the student fails to communicate their absence with the preceptor, site contact, and DMU clerkship coordinator or if an absence is not approved by Des Moines University. Unexcused absences will be tracked over the course of the clinical years. For the first unexcused absence, a student will receive a letter of warning. For
the second unexcused absence, the student will receive a letter of warning and be referred to the Academic Progress Committee. If the student has a third unexcused absence during their clinical training, it will result in rotation failure.

Absences for Residency Interviews and Board Exams: Students are allowed to be absent from clinical rotations for board exams and residency interviews. The following guidelines apply for these specific circumstances:

- Students are encouraged to give as much notice to their clinical site and clerkship coordinator as possible when scheduling residency interviews. Des Moines University requests at least 14 days’ notice when scheduling residency interviews. Exceptions can be made if a student is offered a last-minute interview spot, pending the approval of the clinical site.
- Exceptions may be made for the maximum number of days missed off of rotation to accommodate residency interviews. This is on a case-by-case basis and factors taken into account include:
  - Total number of planned absences already scheduled during the rotation
  - Number of days already planned to be missed during the same week as the pending request
  - Days already missed from the rotation due to illness
  - Structure of the rotation such as hours scheduled and ability to make up the clinical time
  - Site specific policies regarding the maximum number of missed days allowed during the rotation
- All residency interview absences must be approved by the clinical site. Sites frequently have their own policies for maximum number of days missed from a rotation and minimum notice required for absences. In the case where a site’s policy is more restrictive than the Des Moines University policy, Des Moines University will honor the site’s policy.
- Board exam days are credited as clinical time, but travel days to the board exams are considered days off from rotations.

Conference Absences: Students are encouraged to engage in non-clinical opportunities while on clinical rotations. The following provides guidance for students to receive permission and credit for these activities. Some examples of educational activities include:

- OMM-related education activities for OMM Fellows, as approved by the OMM Department Chair
- Participation in national or state osteopathic, medical, or student boards/committees (e.g. AOA, ACOEP, ACOFP, COSGP, UAAO, AMSA, IOMA, etc.)
- Other educational activities as preapproved by the clinical site and Associate Dean for Clinical Affairs
- Students will be allowed to attend one medical conference per year for networking with residencies
- Master’s courses required for dual degree students

Additional items to consider when requesting an educational absence follow:
• All educational absences are subject to the approval of the clinical preceptor, rotation site, and Office of Clinical Affairs
• In addition to the approval process outlined above, any educational absence that will be greater than two days will require any days greater than two days missed to be made up. Make up for educational absences must be clinical time outside time already scheduled on the rotation.
• When requesting the educational absence of greater than two days, the student should outline a plan for making up time otherwise the request may be sent back to the student or denied. If the time greater than two days missed cannot be made up with clinical experience, the request will be denied.
• The student may work with his or her preceptor, clerkship coordinator, Director of Undergraduate and Graduate Development, or Associate Dean for Clinical Affairs if needing assistance in creating a make-up plan.
• All requests should be submitted via Special Circumstance and at least 30 days prior to the date of the requested time off. Failure to adhere to this 30-day policy may result in denial of the request.
• As with all absences, all educational absences must be logged.
• Approval for an educational absence is subject to the student’s overall academic and professional record.
• Travel to and from any activity is not considered clinical education time, but will be included in the student’s case log.
• Students are responsible for travel and conference expenses.
• Any student absent from clinical rotations for an educational absence without seeking prior approval is in violation of this policy and may be subject to disciplinary action.

Leaves of Absence: Any extended absence, including those due to illness or family emergencies, may require the student to take a voluntary leave of absence (LOA). The student would have an opportunity to make up missed clerkship time at a later date. An LOA may delay the student’s rotation schedule and subsequent advancement to the next academic year, graduation and/or match and residency.

Make-up Policy: Students will be required to make up excused missed rotation time if they miss more than two shifts in a week. Students may make-up missed time by doing one of the following:
• Participate in clinical activity at the site on a weekend. This is the preferred make-up activity and will be the expected make-up plan if the site has weekend or extended weekday hours. Clinical activity is required for making up educational absences longer than two days in length.
• If the rotation is at a site without weekend hours, the missed rotation time may be made up in the form of an assignment which may include:
  o Online modules
  o Reading assignment
  o Research or practice improvement project
  o Reflection paper
The student’s preceptor may be consulted when determining the requirements of the assignment. When notifying their clerkship coordinator of the missed time, the student should include a plan
for making up time missed greater than two days. The student may work with his or her
preceptor, clerkship coordinator, Director of Undergraduate and Graduate Development, or
Associate Dean for Clinical Affairs if needing assistance in creating a make-up plan. Students
who do not make up missed rotation time may delay their progression to the next academic year,
graduation and/or match eligibility.

Didactic sessions missed will be made up as decided by the clerkship director on a case-by-case
basis. Post rotation exam make-up is discussed in the Post Rotation Exam Policy section.

**Holiday Policy:** Students are expected to be on rotation on holidays unless the facility is closed
and/or they are told not to attend by their preceptor or site contact. As with all absences from
rotation, regardless of reason, holiday absences must be logged in the case logs.

---

**EVALUATION**

**Examinations and Other Summative Assessment Methods:**
A clinical evaluation form must be completed by the attending physician and submitted to the
Office of Clinical Affairs at the completion of each clinical rotation in order for a grade to be
assigned. For rotations where the student works with residents, a resident may complete the
clinical evaluation form, but it must be co-signed by the attending physician. Only one
evaluation form will be accepted for each rotation. In order to receive a passing grade in a core
rotation that requires a post rotation exam, a student must pass both components: the clinical
evaluation and the post rotation exam.

**Grading:**
For the core clinical clerkships of family medicine, general internal medicine, psychiatry, general
pediatrics, general surgery, obstetrics/gynecology, and emergency medicine, the following
grades are possible: Honors, High Pass, Pass, and Fail. All other rotations, both elective and
required, are pass/fail.

**Core Clinical Clerkships:** Grading for the core clinical clerkships are determined by the
preceptor evaluation and post rotation examination scores. Both components must be passed
in order for the student to receive a passing grade. Core clinical clerkships are the required
third year family medicine, general internal medicine, obstetrics and gynecology, psychiatry,
general surgery, and general pediatrics. The required emergency medicine, which can be
completed in either the OMSIII or OMSIV year, is also considered a core clinical clerkship.
These are the only rotations where a “Honors” or “High Pass” grade is possible. Criteria for
Honors and High Pass are below.

<table>
<thead>
<tr>
<th>Score Ranges</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average rating in both the BMD and PED of $\geq 4.6$ AND a COMAT score of $\geq 105$</td>
<td>Honors*</td>
</tr>
<tr>
<td>Score Ranges</td>
<td>Grade</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Average rating in both the BMD and PED of $\geq 4.6$ AND a COMAT score of $\geq 95$</td>
<td>High Pass*</td>
</tr>
<tr>
<td>Average rating in both the BMD and PED of $\geq 4.0$ AND a COMAT score of $\geq 105$</td>
<td>High Pass*</td>
</tr>
</tbody>
</table>

*BMD*: Biomedical Domain on the clinical evaluation  
*PED*: Professionalism and Ethics Domain on the clinical evaluation

*In order to earn an Honors or High Pass grade in a clerkship, a student must* not have any unauthorized absences during the clerkship and must not have failed the COMAT on initial attempt. The student must also be in compliance with the case log policy.

**Clerkship Failure: A student will fail a clerkship if one of the following occur:**

1. For core clerkships where a post rotation exam is required, a student would fail the rotation if he or she fails all of the following in a single rotation: the post rotation exam, the retake of the post rotation exam, and the oral exam
2. Confirmed third unexcused absence from a rotation
3. One or more “unacceptable” ratings on the preceptor evaluation form
4. Six or more “below expectations” ratings on any single preceptor evaluation form
5. If the student receives greater than 2 and less than 6 “below expectations” ratings on a single preceptor evaluation, the student will be placed on academic probation until graduation. While on academic probation, if a student receives 3 or more “below expectations” on a single preceptor evaluation, the student will fail the clerkship.

**Post Rotation Exam Policy:** The following policy applies to all students on their third-year core required rotations which include: Family Medicine, General Internal Medicine, General Pediatrics, General Surgery, OB/GYN and Psychiatry. This policy also pertains to students on their 3rd or 4th year Emergency Medicine or OMM rotations.

1. All students are required to take a post rotation examination after each core rotation. The Family Medicine post rotation exam is to be taken after the 1st four-week required Family Medicine rotation. The post rotation exam must be taken on the last Thursday or Friday of the clinical rotation.
   - Emergency Medicine, Family Medicine, General Surgery, Internal Medicine, OB/GYN, Pediatrics and Psychiatry examinations will be completed through the NBOME – COMAT website. The minimum passing score is 80.
   - OMM examinations will be completed through the learning management system. The minimum passing score is 70.
   - Any student on a clerkship with a required post rotation exam will receive an email from the department’s academic assistant mid-way into the rotation to arrange the exam. If a student has not received information on the exam, the student is required to contact the appropriate academic assistant by Tuesday morning of the 3rd week of the rotation to ensure that all students are enrolled for the exam.
• All exams must be monitored by a DMU-approved proctor.
• No food, drinks, books, notes, PDAs, i-Touches, cell phones, or other electronic devices are allowed during the exam.
• If students take an end-of-rotation exam on Thursday or Friday morning, they are expected to report to their clerkship following the exam.
• Accommodations granted to students by DMU will be honored in the post rotation exam.

2. Extensions for completing these examinations may be authorized due to illness or emergencies. To be considered for an extension, the student must:
  • Contact the department academic assistant via phone or email as soon as the student realizes that an extension is required.
  • Explain the circumstances regarding the situation, and why it will not be possible to complete the examination within the specified period of time.
  • Granting of extensions will be approved on a case-by-case basis. The clerkship director will make the final decision as to whether or not an extension is granted.

3. To pass the clerkship, the student must pass the written post rotation exam:
  • If administered in the learning management system, a score of at least 70% is required to pass.
  • If administered through the NBOME – COMAT website, a standard score of 80 is required to pass.
    i. COMAT uses standard scores rather than percentages. For more information please review the NBOME website.

4. Post Rotation Exam Failure:
  • Students who fail their post rotation exam will not be eligible for Honors or High Pass for that rotation.
  • Students must contact the department’s academic assistant within 48 hours of being notified of an examination failure to arrange the remediation examination.
  • Students who fail the post-rotation retake must contact the department’s academic assistant within 48 hours.
    o The academic assistant will schedule the student for an oral examination.
    o The oral remediation exam will be videotaped/recorded.
    o The clerkship director, as well as other DMU faculty members, will be present for the administration of each oral examination.
    o The student is responsible for making all arrangements, including time off from their current rotation as well as travel back to the University for the oral examination.
    o Failure of the oral examination will result in failure of the rotation.
    o Students must retake the end of rotation exam within 2 weeks of the notification of the initial failure.
    o The oral examination will be taken within 4 weeks of the notification of the failure of the second end of rotation exam.
**Remediation:** Clerkship failures require remediation as determined by the appropriate college’s Academic Progress Committee (APC).

If a student is required to repeat a clerkship that requires passage of a post rotation exam, the student will be required to retake the post rotation exam after the clerkship is repeated, regardless of previous score. Students are not eligible to earn an Honors or High Pass grade on a clerkship that is being repeated due to clerkship failure.

Post rotation exam failure remediation is discussed in the Post Rotation Exam Policy Academic Integrity Statement

The faculty of DMU-COM believe, that as future professionals, the students must observe high standards of honesty and integrity and that faculty and students have a shared responsibility to diligently ensure these high standards are upheld. Consequently, the faculty and students agree to abide by the tenets of the University’s Integrity Code and to dutifully report any violation of the Code to appropriate officials. Students who violate the Integrity Code will be subject to misconduct penalties as outlined in the current COM Student Handbook.

**COPYRIGHT POLICY**

Copyright Notice: Information presented within this course may contain copyrighted material used for educational purposes. It is intended for use only by students enrolled in this course.

Reproduction or distribution of this Copyright Compliance material is strictly prohibited. Unauthorized use of this material is a violation of the DMU Integrity Code and may also violate federal copyright protection laws.

**DISABILITY**

Des Moines University is committed to providing equitable access to learning opportunities for students with documented disabilities who meet the technical standards of the program, with or without reasonable educational accommodations. If you are a student with a disability (e.g. mental health, attentional, learning, chronic health, sensory, or physical) who needs reasonable accommodations to fully access the curriculum and educational services offered at DMU, please contact the Accommodations Specialist in the CTL in person, by phone (515-271-1516) or by email (accommodations@dmu.edu) to begin the confidential conversation and interactive process. Students will be asked to submit an application and appropriate documentation to support their request for accommodations in the classroom and clinical settings. If granted, accommodations are not provided retroactively, and cannot be determined by faculty members directly. Therefore, students are encouraged to request educational accommodations far in advance of the date the accommodations are needed. Please, review the policy and procedure for Accommodations in Educational Programming to access the required forms and documentation to support your request.