

Internal Medicine Clerkship

Course Description

Overview:

The Internal Medicine clerkship is an 8-week clerkship comprised of two 4-week clinical rotations. Students will complete one rotation in inpatient general medicine at academic hospital and another rotation on an inpatient subspecialty service (Cardiology or Hepatology) at an academic hospital, another inpatient general medicine service at an academic or community hospital, or a rotation in the outpatient clinical setting.

Inpatient rotations will occur at one of our academic hospitals which are the Foster G. McGaw Hospital (LUMC) and the Edward Hines Jr. Department of Veterans Affairs Hospital (HVA), and at our affiliated community hospitals which are MacNeal Hospital and Naples Community Hospital (NCH).

Outpatient rotations will occur at the Loyola Outpatient Center (LOC) or one of our satellite clinics (including LaGrange, Burr Ridge, Elmhurst, Elmwood Park, Oakbrook Terrace, North Riverside, Hickory Hills, Homer Glen, Park Ridge, Oak Park, and Tinley Park), Edward Hines Jr. Department of Veterans Affairs Hospital (HVA), or Access to Care Clinic.

Students will be assigned to different services at each hospital site. These service assignments are made by the clerkship coordinator and will be made known to students before the start of the clerkship.

At the beginning of each rotation there will be a group orientation, as well as an orientation at each specific site, at which time students will receive pertinent materials. Students are expected to work six out of seven days while on the inpatient services with one weekend day off. Students on the outpatient rotation are not expected to work weekends.

At the end of each four-week block, hospital assignments are changed. Students are not on duty or on call over these "switch" weekends between assignments.

Clerkship Requirements and Expectations:

Work responsibilities:

You are expected to actively assist in providing care for assigned patients. This includes the following:

- Constructing H&P's, problem lists with assessments and plans, orders, and progress notes or, in the outpatient setting, longitudinal care follow-up notes.
- Care conscientiously for all patients with appropriate standards of professional, ethical, and moral conduct.
- Interacting with families as appropriate.
- Performing routine clinical procedures with appropriate supervision.
- Participating in rounds and demonstrating evidence of reading about patients and accessing and applying medical literature.
- Taking call as assigned; responsibilities will be reviewed during the orientation at each site.

With regards to work hours, students are expected to work six out of seven days per week while on inpatient services, averaging three days off per month. On the outpatient month, students will work Monday through Friday. During the switch weekend between blocks all students will be off duty. The work hours may vary by clinical site or clinic; these will be reviewed during the orientation at each site. Students are not to exceed the maximum of 80 hours per week, including all call activities, and no more than 16 hours in a day.

University designated holidays will be recognized as days on which students are not expected to be on duty or on call (see *Academic Policy Manual - Attendance*). Students will also be excused from their clinical responsibilities for their PCM-3 days. Students will also be excused from clinical duties on the day of their OSCE/Free Text exam as well as the day before the NBME exam (which occurs on the last day of the clerkship).

Please review the separate document for day off requests and sick days.

Educational expectations:

You are expected to prepare for, attend, and actively participate in all structured clerkship activities, including debriefing sessions and examinations.

Direct Observations:

Direct Observation of key components of taking a history and performing the physical examination is an important educational opportunity to receive individualized formative feedback and to continue to grow in these skills toward expertise.

During each core clerkship, you will be required to have a faculty physician or a resident:

1. Observe you take a key portion of one history.
2. Observe you perform a part of the physical examination. Each clerkship oversees a particular part of the exam and requires one or multiple observations as determined by the clerkship directors.

For the Internal Medicine Clerkship, you are required to have three observed lung and heart examinations. After each observation, be sure to enter the Direct Observation tracking system through MyLumen. Follow the prompts. An email will automatically be generated to the physician who observed you for verification.

Note that failure to complete this requirement or enter the data in the system will result in a grade of "U" for the clerkship until the requirement is fulfilled and the data entered. The deficiency may also be considered in the evaluation of your professionalism competency.

Please take full advantage of this opportunity to learn and improve your skills as you work with patients. Be intentional and deliberate in seeking out the tips your teachers may be able to offer.

Required Patient Cases / Patient Logs:

During the Internal Medicine Clerkship you will be required to see the following patients: Abdominal Pain, Acid Base Disorder, Acute Pancreatitis, Altered Mental Status, Anemia, Acute Coronary Syndrome, Acute

Kidney Injury, Chest Pain, Chronic Kidney Disease, Chronic Obstructive Pulmonary Disease, Congestive Heart Failure (CHF), Constipation, Coronary Artery Disease (CAD), Cough, Dementia, Depression, Diabetes Mellitus (any type), Diarrhea, Dyspnea, Edema, Electrolyte Disorders, End of Life Care, Gastrointestinal Bleeding, Hypertension, Immunosuppressed state (HIV, transplant, immunosuppression medications), Joint Pain, Liver Disorder, Obesity, Pneumonia, Skin and Soft Tissue Infections, Substance Use, Tobacco Use, Urinary Tract Infection, and Venous Thromboembolic Disease

If you are unable to fulfill one of these patient encounters, an alternate experience will be assigned. You must log these electronically before the end of the clerkship to receive credit.

SMART Goal:

In addition, you will be expected to set and review one SMART goal. This goal should be created and submitted by Friday at the end of the first week of the clerkship. The form is available on the Sakai site, and it should be uploaded into the Sakai site once completed. This goal should encompass a learning point that you would like to accomplish over the clerkship. Your progress on this goal should be reviewed during the mid-clerkship meeting. The SMART goal does not need to be formally accomplished during the clerkship and can be aspirational. It will be used to provide formative feedback. If the goal is not submitted or is submitted late, this will be considered a concern for professionalism and practice-based learning clerkship competencies.

Health Systems Science Integration:

As part of the vertical component of the Health Systems Science Course, you will be required to complete an IHI module, review the associated PowerPoint, and submit an attestation that this has been completed. The module will be focused on how to report Patient Error. You can discuss this as it arises naturally on your clerkship experience. If you notice an error you may discuss submitting a Voice Report with your attending and resident physicians, but please do not do this without their oversight.

Attendance and Time Off Policy:

Attendance is expected at all functions of the Internal Medicine Clerkship, including orientation, lectures, case discussions, team rounds, clinics, debriefing sessions, and exams. Absences from duty on any of the required activities must be reported according to school policy. If you need to be absent, it is your responsibility to notify those people affected by your absence including your service attending (or resident, if attending not available) on inpatient rotations, the Clerkship Director and Clerkship Coordinator, and the Medical Education Office or coordinator at your assigned site. If you are sick, you must report to Student Health/Wellness Center to be evaluated; they will make the determination on when you can return to clinical duties. If absences are unexcused you may be marked for professionalism concerns.

Special requests for time off including weddings, research presentations, personal appointments, etc., must be submitted via email to the course coordinator at least one month prior to the start of the clerkship; this includes requests for time off on weekends and evenings. Supporting documents should be attached to the request (invitation, save-the-date, brochure, etc.). You are allowed 2 consecutive days off. Please do not request 3 consecutive days off.

Core Curriculum:

During the clerkship, there is a defined set of educational activities in which students must participate.

These educational activities are designed to help you meet the competencies and cover the clerkship learning objectives.

Lectures:

These occur on Tuesday afternoons at the Loyola medical school. All students must attend no matter which site they are assigned to. These lectures include: Acid-Base, Anemia, Cardiac Clinical Correlation, Chronic Kidney Disease, Cirrhosis, Common Infections, Constipation and Diarrhea, Health Maintenance, Hypertension and Dyslipidemias, Hyponatremia, Fatigue and Unintentional Weight Loss, Rheumatologic diseases and Immunological tests, and Note Writing. Materials for these lectures are located under the Lectures tab on the website.

Case Discussions:

These are conducted on various days at Loyola Hospital and the VA Hospital. There are fourteen case discussions each with recommended references and a discussion guide. These case discussions include: Acute Kidney Injury, Acute Pancreatitis, Altered Mental Status, Congestive Heart Failure, Cough and Upper Respiratory Infections, COPD, Coronary Artery Disease, Diabetes, GI Bleed, Fever, Headache, Hypothyroidism and Hyperthyroidism, Venous Thromboembolic Disease, and Pneumonia.

Students are expected to prepare for these cases and come ready to discuss the questions. The answer keys will be uploaded to the website after the fourth and sixth week of the clerkship.

For students rotating at MacNeal Hospital, Naples Community Hospital, or on an outpatient rotation may join by zoom. However, we understand that there are occasions due to schedule conflicts that may prohibit a student to join. In these situations, students will be expected to review the case discussion answers themselves.

Aquifer Cases:

The Aquifer Internal Medicine cases are a series of 36 interactive virtual cases that mirror our clerkship learning objectives. These are an excellent resource to bolster your learning and to fill gaps in learning topics that you have not personally seen or covered in the didactic sessions.

Assessments and Grading:

Your Internal Medicine Clerkship grade is comprised of the following:

1. Mid-evaluation from block 1 = 8.75%
2. Final evaluation from block 1 = 8.75%
3. Mid-evaluation from block 2 = 8.75%
4. Final evaluation from block 2 = 8.75%
5. NBME Final Subject Examination = 30%
6. OSCE and Clinical Reasoning Exam = 10% (50% SP encounter and 50% CRE)
7. Free-text exam = 10%
8. Radiology Presentation = 5%
9. Clinical Question Conference = 5%
10. H&P Assessments = 5% (2 each accounting for 2.5% individually)

Your final grade will be determined as below:

Honors: $> \text{Mean} + \text{SD} \times 0.75$

High Pass: $\text{Mean} + \text{SD} \times 0.75$ to $\text{M} - \text{SD} \times 0.25$

Pass: $<M - SD \times 0.25$

We will do a year-end assessment of all the pooled grades across all the cohorts and will adjust our cut-points to achieve a distribution of 30% Honors, 40% High Pass, and 30% Pass. If the updated grade cut-points move your score into the above range, your final grade will be adjusted upwards. Please note that we will not move any grades downward. This adjustment will occur typically within four to six weeks after the end of the academic year.

According to school policy (see Academic Policy Manual - Attendance), all students are obligated to take the required clerkship examinations on the date, time, and place specified by the department. Exceptions to this policy may be granted for:

1. Reasons of illness, which must be documented by a note from a physician and/or report from the Student Health Office or Wellness Center at Loyola, addressed to the Associate Dean for Student Affairs.
2. Any other emergency situation in which evidence can be provided to the Associate Dean for Student Affairs to justify absence from a scheduled examination.

Students excused from an examination by the Associate Dean for Student Affairs for an acceptable reason are responsible for making arrangements with the Clerkship Coordinator to take a make-up exam within thirty days of their return, or as soon as a make-up exam is offered by the department.

Unauthorized absence from an examination normally will result in a grade of zero for that examination, the consequence of which in almost all cases is course failure. Changes in the examination schedule for individual students will not be granted.

Formative Feedback:

In order to provide students with formative, actionable feedback prior to their graded clinical performance evaluations, students will be asked to have their team (at least one team member) complete the formative feedback form. This form should be completed and submitted to Dropbox on Sakai at the end of weeks 1, 3, 5, and 7.

Clinical Performance Evaluation:

Students will have four separate clinical performance evaluations during this rotation.

On the inpatient service, the evaluation will be collectively completed by the resident and attending physicians with whom the student has worked the two weeks prior. It is recommended that they have face-to-face feedback with you regarding this evaluation after it is completed.

On the outpatient service, please have your primary care anchors complete the mid-rotation evaluation form during the 4-week block; this should be completed after the first two weeks of the rotation. It is recommended that they have face-to-face feedback with you regarding this evaluation after it is completed. The score for this evaluation will be the averaged score from the anchors. At the end of the four-week outpatient block, please provide final evaluation forms to your primary care anchors and the subspecialty physicians with whom you have worked. Please note that the final clinical performance evaluation grade for this will be determined as follows: 50% from the averaged scores from the primary care anchors and 50% from the averaged scores of the subspecialty physicians.

NBME Subject Examination:

The NBME Subject Examination will be administered on the last day of the clerkship. Two weeks prior to the end of each clerkship, students will receive by email the details of the final week. Students will be given two hours and forty-five minutes for this exam. The passing score is a 58 which is within the recommended NBME range based on their most recent standard setting exercise; this represents a score at the 5th percentile nationally.

According to school policy (see Academic Policy Manual), all students are obligated to take the required clerkship examinations on the date, time, and place specified by the department. Exceptions to this policy may be granted for:

1. Reasons of illness, which must be documented by a note from a physician and/or report from the Student Health Office at Loyola, addressed to the Associate Dean for Student Affairs.
2. Any other emergency situation in which evidence can be provided to the Associate Dean for Student Affairs to justify absence from a scheduled examination.

Students excused from an examination by the Associate Dean for Student Affairs for an acceptable reason are responsible for making arrangements with the Medicine Coordinator to take a make-up exam within thirty days of their return, or as soon as a make-up exam is offered by the department.

Unauthorized absence from an examination normally will result in a grade of zero for that examination, the consequence of which in almost all cases is course failure. Changes in the examination schedule for individual students will not be granted.

OSCE and Clinical Reasoning Examination:

During the sixth week of your Internal Medicine clerkship, you will be asked to perform a focused history and physical exam on a standardized patient. You will have 30 minutes for this encounter. Patient charts are located on the door of each examination room providing basic information about your patient. You will be given time to review the chart before entering the exam room. You may take the chart into the room with you. Treat the standardized patient as if he or she were your real patient; do whatever you would do in an actual clinical setting. All auscultation, percussion, and palpation are to be done on the skin and not over the patient's gown or other items of clothing. 20 minutes into the encounter you will hear an announcement to let you know that 20 minutes have gone by and that you have 10 minutes remaining. Please do not respond to the announcement. If you finish the encounter before 30 minutes have gone by you may close the encounter but know that once you do so you cannot restart the examination. Upon completion of the interview and physical, the standardized patient will provide you with feedback based on the Patient Perception Scale.

Please note that all patient encounters are digitally recorded.

After the standardized patient feedback, you will then proceed to a designated computer in an SDL room. You will have 30 minutes to complete this examination. This consists of a patient note in which you will be asked to record a short history focusing on pertinent positive and negative findings for the patient's presenting problem, document pertinent positive and negative physical exam findings, list up to three diagnoses with associated history and physical exam findings, and up to six diagnostic tests you would like to perform. This examination will be evaluated by the standardized patient and the clerkship director. You will have no expected clinical duties on the day of this exam.

Please note that one to two weeks prior to this examination an OSCE preparation session will be held on a Tuesday afternoon during your didactic time to give you tips and help you best prepare.

Free-text Examination:

The free-text examination is a short answer test comprised of five questions. This exam is designed to test your medical knowledge and diagnostic reasoning in short answer form. This exam will occur during the sixth week of your Internal Medicine clerkship on the morning before the OSCE. It is a computerized exam that will be given in an assigned SDL room. You will have one hour and thirty minutes to complete it. The exam will be graded by the clerkship director or the assistant clerkship director. You will have no expected clinical duties on the day of this exam.

Please note that one to two weeks prior to this examination a preparation session will be held on a Tuesday afternoon during your didactic time to give you tips and help you best prepare. The material for this examination is linked to out internal didactics, so staying focused on the lectures and case discussions will help you best prepare.

Radiology Presentation:

The radiology presentation is designed to bolster your understanding and interpretation of common radiology tests and how they are used to diagnose and treat patients. In addition, it is an excellent opportunity to learn to effectively communicate with our radiology colleagues to insure complete understanding of our patients and their care.

Prior to the start of the clerkship, you will be assigned a time on a designated Tuesday afternoon during the preset didactic time for your individual presentations. You will be expected to identify a patient that you have cared for, present his or her relevant history and findings, and then review the pertinent imaging findings. You are expected to show the actual images with any patient identifying information removed. It is highly recommended and important for your final grade on this assessment to meet with a radiologist to review the images; it does not have to be the physician who read the images initially, and this person may be a physician or resident. All types of imaging are welcome including xrays, CT scans, MRIs, ultrasounds, echocardiograms, catheterizations, fistulograms, etc; please be sure you meet with the correct person to review the images (i.e. cardiologist will help read an echo, radiologist will help read a CT, etc.) Additionally, you are expected to summarize any take-away learning points for your peers. This presentation should be approximately five minutes to ten minutes (no longer than 15 minutes) long in power-point format.

A grading rubric has been developed and will be completed by the clerkship director or the assistant clerkship director. Please review this prior to completing your presentation so you are aware of how you will be graded.

There are five components: Background Information, Radiology Review, Application to Patient Care, Interprofessional Collaboration, and Presentation Quality. A student may score needs remediation (1 point), below expectations (2 points), meets expectations (3 points), or exceeds expectations (4 points). A total of 20 points is achievable for this assessment.

Clinical Question Conference:

This presentation is designed to assess your ability to form a relevant and interesting clinical question regarding a patient you are caring for and demonstrate the ability to perform an effective literature search to find evidence regarding your clinical question. In addition, it is designed to assess your ability to critically appraise the cited articles and apply the acquired evidence to your particular patient. This is a critical skill to develop now as it will help you practice evidence-based medicine throughout your future career.

This presentation will be completed during one week of one inpatient month on the Internal Medicine clerkship. You will be assigned a site and date at the start of the clerkship. You are expected to identify a patient for whom you are caring in order to complete this presentation. You may use the student form to help document your clinical question, appraisal of the literature, and how you will apply the evidence to your patient. This form should be your guide to creating your presentation but does not need to be turned in. Please also review the evaluation form to maximize your ability to perform well on this presentation. The presentation will be given during a Clinical Question Conference which will be attended by the students presently rotating at your inpatient site and two grading faculty members. The presentation should be approximately 5-10 minutes long and may or may not include a power-point; please do not exceed 15 minutes.

A grading rubric has been developed to evaluate this presentation. There are five components: Ask, Acquire, Appraise, Apply, and Presentation Quality. A student may score needs remediation (1 point), below expectations (2 points), meets expectations (3 points), or exceeds expectations (4 points). A total of 20 points are achievable for this assessment.

Faculty members have been instructed to grade students based on their ability to achieve each particular point. They are expected to complete the evaluation form directly following each student presentation and make comments as appropriate. If time allows, faculty have been instructed to review the form with each individual student at the end of the session; if this is not possible due to time constraints you may review the evaluation after it has been submitted to the course coordinator.

Each grading faculty member will complete the evaluation form independently and the scores will be averaged for the final grade.

H&P Assessments:

Students will be expected to complete a minimum of four write-ups which should be evaluated formatively by house staff or attendings using the "Write-up Evaluation/Feedback" form. **Two of these notes must be H&Ps as only H&Ps will count toward your grade; all four can be H&Ps but you may also select two notes to be progress notes.** All four of these should be submitted with the feedback forms by the end of the clerkship to the course coordinator. Two of these will be designated by the students to be summatively graded by the Clerkship and Assistant Clerkship Directors. A validated rubric has been adapted for assessment purposes; please review this rubric as you are writing your H&Ps, so you are aware of what needs to be documented for you to achieve as many points as possible. Nine total points are achievable for each of these evaluations.

Faculty and Course Evaluations:

Students are required to evaluate their experiences during the Clerkship by completing the on-line Clerkship evaluations for the overall clerkship, each faculty and resident with which they work, and the faculty who lead our case discussions and lectures. Please complete these evaluations in a timely manner.

Recommended Textbooks:

There is no single text that the Department of Medicine requires you to buy solely for this clerkship. We have recommended a number of texts that should help you in your pursuit of life-long learning. Many of these texts are referenced throughout your curriculum. These texts and links to them through the Loyola Health Sciences Library are below.

Harrison's Principles of Internal Medicine, 21e.

<https://accessmedicine-mhmedical-com.archer.luc.edu/book.aspx?bookID=3095>

Harrison's Manual of Medicine, 19e.

<https://accessmedicine-mhmedical-com.archer.luc.edu/Book.aspx?bookid=2738>

Symptom to Diagnosis: An Evidence-Based Guide, 3e

<https://accessmedicine-mhmedical-com.archer.luc.edu/book.aspx?bookID=2715>

Step-Up to Medicine, 4e.

<https://clerkship-lwwhealthlibrary-com.archer.luc.edu/book.aspx?bookid=3254&rotationId=0>

Pocket Medicine: The Massachusetts General Hospital Handbook of Internal Medicine

<https://oce-ovid-com.archer.luc.edu/book?SerialCode=02272997>

JAMA Users' Guide to the Medical Literature: A Manual for Evidence-Based Clinical Practice, 3e.

<https://jamaevidence-mhmedical-com.archer.luc.edu/book.aspx?bookID=847>

JAMA The Rational Clinical Examination: Evidence-Based Clinical Diagnosis

<https://jamaevidence-mhmedical-com.archer.luc.edu/Book.aspx?bookid=845>

The Only EKG Book You Will Ever Need, 9e.

<https://clerkship-lwwhealthlibrary-com.archer.luc.edu/book.aspx?bookid=3204&rotationId=0>

Toy, Eugene C. *Case Files. Internal Medicine*. Sixth edition., McGraw-Hill Education, 2021.

<https://casefiles-mhmedical-com.archer.luc.edu/cases.aspx?gboscontainerID=248>