

Medicine Clerkship

Academic Year 2025-2026

Department of Internal Medicine

MED MD 302

March 2025

Clerkship Director: Sonia Ananthakrishnan, MD

Clerkship Coordinator: Aasman Singh Lama





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Clerkship Learning Objectives

By the end of the clerkship, each student will be able to

- I. Demonstrate **professional and humanistic behavior in clinical and clerkship-related responsibilities**:
 - Be present and punctual
 - Proactively clarify your role and responsibilities and reliably respond to patient care needs.
 - Appropriately identify your position as “Student” or “Student Doctor.”
 - Maintain confidentiality
 - Be forthright and accept responsibility for errors
 - Ask for help appropriately
 - Build a therapeutic relationship through a respectful, empathic approach that **gains the trust of the patient**
 - Dress and behave in a way that promotes patient and team comfort, trust, and confidence in you
 - Demonstrate that the interests of the patient guide your behavior by:
 - Working to meet the patient’s needs – at times, this means accepting personal inconvenience
 - Advocating for patient’s needs – e.g., getting a test, consult or follow-up appointment
- II. Develop productive, collaborative working relationships with other members of the health care **team** and system, effectively contribute to the provision of quality patient care and work toward improving **the systems of care**.
- III. Use proper technique to perform an accurate, appropriately detailed, and organized **history and physical examination** efficiently and sensitively, emphasizing the intermediate and advanced physical diagnosis skills involved in volume assessment, the cardiovascular exam, and the chest/pulmonary exam.
- IV. Communicate clinical information accurately and demonstrate your understanding of the patient’s problems through concise, convincing, well-organized **patient presentations, admission write-ups, progress notes, and handoffs** that are appropriately focused on the audience, purpose, and time available for communication.
- V. **Identify and prioritize your patients’ problems, formulate an appropriate differential diagnosis**, and outline an approach to diagnosis and management supported by clinical data and sound reasoning.
- VI. **Educate patients** about their conditions and partner to develop and implement a treatment plan.
- VII. Perform the designated **procedures** with appropriate technical proficiency while demonstrating attention to the patient’s needs and concerns and describing a clear understanding of benefits/risks, indications/contraindications.
- VIII. Demonstrate a core foundation of **knowledge** (scientific, ethical, socio-cultural) guided by the course objectives that is necessary to provide high-quality patient care and understand advances in medicine.

- IX. **Identify and address your learning needs** (by asking questions and critically incorporating information from appropriate resources into the decision-making process) and effectively share this information with colleagues.
- X. Solicit and probe for helpful **feedback** and respond with **improved performance**.

Contact Information

Clerkship Director



Sonia Ananthakrishnan

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Office Hours: Students may email to set up an appointment

Associate Clerkship Directors



Radha Govindraj, MD

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Office Hours: Students may email to set up an appointment



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Katy Bockstall, MD

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Clerkship Coordinator



Aasman Singh Lama
Program Coordinator
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Email: aasmansi@bu.edu
Office: Evans 122
Office Hours: 9 AM – 5 PM

Clerkship Description

Focus of clerkship

The Medicine Clerkship is an 8-week experience designed to develop your ability to function as a caring, increasingly independent clinician while supervised on a multi-professional team. During the clerkship, you will learn clinical medicine while working side-by-side with teams of residents and/or faculty providing care to a cohort of inpatients. As your knowledge and skills grow, you will earn increasing patient care responsibility. This direct patient care experience is complemented by a unique enrichment in which you work in small groups with a clerkship director and hone essential clinical skills (including intermediate-level communications skills, physical diagnosis, and clinical reasoning). Your education is supplemented with conferences that focus on core topics. The clerkship is divided into two mini-blocks of 4 weeks each, and most students spend time at 1 or 2 of our clinical sites.

The goal of the clerkship is to develop someone we would want to care for our family members: a professional, highly caring clinician who is increasingly independent and knowledgeable and a strong team member.

The Medicine Clerkship aims to:

- Introduce you to the world of internal medicine
- Develop your skills as a clinician
- Enable you to become a contributing, collaborating team member
- Support your skills as a self-directed learner

The Self-Directed Learner

We welcome you to the world of medicine, where growth in the body of knowledge is accelerating and evolving at an unprecedented pace. You must be engaged and take ownership of your learning to maximize your learning experience in this clerkship. The Medicine Clerkship builds upon the learner-centered approach and challenges you to be a self-directed, lifelong learner. The dynamic nature of learning while caring for patients requires that you **become adept at identifying your learning needs and acting upon them**. You must continually ask relevant questions, find credible, evidence-based responses, and integrate this information into patient care.

As a student, you will learn to be a flexible learner who employs a variety of appropriate resources ranging from textbooks and medical literature to consultants and one who solicits and responds effectively to feedback. The clerkship provides you with many opportunities to read in-depth, to become the “local expert” on your patients, to share your learning with your team, and to improve continuously.

Contributing, Collaborating Team Member

Medicine is team-based, requiring you to **work effectively with multiple healthcare providers from different disciplines within a complex system**. The Clerkship challenges you to “identify your niche,” from which you can consistently contribute to patient care and team learning and develop the habits and skill sets that will enable you to function effectively within and improve the systems in which our patients receive their care.

Becoming a Clinician

The **primary focus of the clerkship** is to increase your ability to function as a caring, increasingly independent clinician while supervised on a multidisciplinary team. A clinician in this setting is someone who addresses all dimensions of patient care: communication, diagnosis, treatment, and healing. You will do so by growing into taking a central role in the care of assigned patients while also learning from other patients who are on your team.

Clerkship Changes Made Based on Feedback

Several significant changes were made to enhance the educational experience for this academic year. Didactics were updated and integrated into the Core Curriculum for the 2024-2025 year, featuring a completely new full-day schedule with only one exception due to holidays. We anticipate continuing full day didactics in 2025-2026. Thru this past year, we have continued updates to the didactic content to improve instructional quality, incorporating team-based learning with case discussions and creating static small groups, known as learning communities, to facilitate small group discussions within the clerkship. We have also aimed to cover most OCRA topics in our core curriculum.

Multiple ongoing sessions with faculty and residents at all sites related to 3 main components: 1) setting expectations, 2) providing feedback 3) completing assessment. This past summer, clerkship worked in concert with subI leadership to tackle inpatient assessment of clerks and Sub - Is.

Site Directors and Associate Clerkship Directors also received focused development in key areas, including bedside teaching, presentation skills (both written and oral), clinical reasoning (OCRA), assessment and grading, and sharing best practices and challenges across sites.

These changes aimed to refine the clerkship experience, improve educational delivery, and ensure alignment with the program’s goals and objectives.

Diversity, Equity, and Inclusion Initiatives

Didactics on Patients with Incarcerated Status by Ricardo Cruz has been well-received.

Didactics on Substance use disorder: individual perceptions on role of health, awareness of health care disparities, importance of meeting healthcare needs of underserved populations; awareness of gender/cultural biases .

Other Recent Changes to the Clerkship

- Cardiac physical exam session that has been well-received to be continued
- NEW palpitations simulation for 25-26
- NEW POCUS core curriculum focusing on cardiac POCUS for 25-26
- NEW COPD core curriculum for 25-26
- New inclusion of pre-reading for some core curriculum sessions
- Expand SHELF session

- Shortening didactics days
- Addition of self study periods during didactics days

Clerkship Sites

Berkshire Medical Center

725 North St., Pittsfield, MA 01201

Site Director: Steven Lamontagne, slamontagn@bhs1.org, (413) 447-2839

Site Administrator: Stephanie Wade, swade@bhs1.org, (413) 395-7879

Located in beautiful Berkshire County, Berkshire Medical Center is a 298-bed community teaching hospital. Berkshire Medical Center provides primary and specialized health care services to the people of Berkshire County and surrounding communities. Chobanian & Avedisian SOM students work alongside interns, residents, and attendings and share experiences with students from the University of Massachusetts Medical School. Housing is provided, some conferences take place on-site, with Zoom into BMC noon student didactics opportunities and a car is required.

Beth Israel Deaconess Needham

148 Chestnut St., Needham, MA 02492

Site Director: Rajasekhar Tanikella, MD rtanikel@bidmc.harvard.edu (781) 453-3777

Site Administrator: Barbara Breslin, bbreslin@bidneedham.org (781) 453-3000

Beth Israel Deaconess Needham is a 58-bed (including 7 ICU beds) community hospital. The inpatient service is staffed by attending hospitalists, who are internal medicine-trained physicians specializing in the care of inpatients. This means that essentially 100% of your physician interactions will be with attending physicians, which will afford you a higher level of independence and autonomy. Another bonus at BI Needham is the open-ICU concept, where students will have the ability to observe and sometimes participate in the care of patients requiring ICU-level care. There are opportunities to Zoom into BMC student didactics, and a car is helpful.

Beth Israel Deaconess Plymouth

275 Sandwich St., Plymouth, MA 02360

Site Director: Albana Mihali, amihali@bidplymouth.org (508) 830-2679

Site Administrator: Brianna Dowse, bdowse@bidplymouth.org

Beth Israel Deaconess Plymouth is a 150-bed community hospital providing care to patients and communities on the South Shore and Cape Cod. Students will work directly with hospitalists in delivering care (with an opportunity for greater independence and autonomy) and get first-hand experience in an accountable care organization. There are opportunities to Zoom into BMC student didactics, and housing is not provided, unlike in previous academic years.

Boston Medical Center

1 Boston Medical Center Place, Boston, MA 02118

Site Director: Sonia Ananthakrishnan, sonia.ananthakrishnan@bmc.org, (617) 358-3523

Site Administrator: Aasman Singh Lama, aasmansl@bu.edu, (617) 358-3523

Commented [RH1]: Do we have an institutional email for Dr. Mihali? Should not be using personal emails

Boston Medical Center is a private, not-for-profit, 493-bed academic medical center in Boston's historic South End. An acute care, full-service hospital, BMC provides healthcare to a diverse patient population, including vulnerable inner-city residents. The primary teaching affiliate for the [Chobanian & Avedisian School of Medicine](#), BMC is New England's largest safety net hospital. Students work on teams of interns, residents, attendings, and fellows. Students rotate in the Medicine wards and the Medical Intensive Care Unit as part of their Medicine Clerkship. Didactics occur at noon on many weekdays.

Kaiser Permanente

250 Hospital Parkway, San Jose, CA 95119

Site Director: Marina Dergun, Marina.X.Dergun@kp.org, (408) 972-4576

Associate Site Director: Subbu Lakshmi, Subbu.Lakshmi@kp.org

Site Administrator: Pamela Bautista, pamela.bautista@kp.org
Sandeep Tumber, Sandeep.X.Tumber@kp.org
Jacqueline Perez, Jacqueline.Perez@kp.org

The Kaiser Permanente Regional Campus, Silicon Valley, hosts 3rd year core clerkships up to one year. It is an integrated program where student rotations occur at both Kaiser San Jose and Santa Clara Medical Centers; the Medicine Clerkship takes place at the San Jose campus. This clerkship program offers Boston University medical students an opportunity to train within the nonprofit integrated, managed care system that is often hailed as the health care model for the future. You work primarily with hospitalists (there are only rarely psychiatry or family medicine residents). Housing is provided, conferences take place on-site, and a car is required.

MetroWest Medical Center

115 Lincoln St., Framingham, MA 01702

Site Director: Thomas Treadwell, Thomas.treadwell@mwmc.com

Associate Site Director: Travis E Braithwaite, Travis.Braithwaite@teamhealth.com

Site Administrator: Kristina Fancy, Kristina.Fancy@mwmc.com

MetroWest is a 300-bed community hospital in Framingham, MA. Students join teams composed of one attending/hospitalist, resident, and intern. Students attend didactics at MetroWest and there are sometimes opportunities to Zoom into BMC student didactics. A car is required.

Roger Williams Medical Center

825 Chalkstone Ave., Providence, RI 02908

Site Director: Lidia Vognar, Lidia.Vognar@chartercare.org

Site Administrator: Cathy Cardillo, ccardillo@chartercare.org

The medical service at Roger Williams Medical Center in Providence, RI, boasts a blend of primary and tertiary care in an academic community hospital and is the site for the state's only bone marrow transplantation program. Students work alongside interns, residents, and hospitalists to provide patient care. Students attend didactics at Roger Williams, and there are opportunities to Zoom into BMC student didactics. Housing is provided.

St. Elizabeth's Medical Center

736 Cambridge St, Brighton, MA 02135

Site Director: Dariush Jahandideh, Dariush.Jahandideh@bmc.org

Site Administrator: Binali Patel, Binali.Patel@bmc.org

Founded in 1868, SEMC is located in Boston's Brighton neighborhood and provides a full range of medical specialties, including family medicine, cardiovascular care, women's and infant health, cancer care, and orthopedics. Steward Health Care has always been committed to championing the best in health care for patients in the communities where they live and work. Through this partnership, they can open access to academic-based, tertiary-level care to patients in communities across Eastern Massachusetts and beyond. Students work alongside interns, residents, and hospitalists to provide patient care.

West Roxbury VA (Boston VA Healthcare System)

1400 VFW Parkway, West Roxbury, MA 02132

Site Director: Richard Serrao, Richard.Serrao@va.gov, (857) 203-5056

Site Administrator: Laura Muckerheide, Laura.Muckerheide@va.gov, (857) 203-6942
Sarah Pinckney Sara.Pinckney@va.gov

The VA serves as a primary teaching affiliate of Chobanian & Avedisian SOM, and trainees at the VA are exposed to a challenging and rewarding patient population characterized by a heavy burden of chronic illness, particularly cardiovascular and pulmonary diseases, and medical problems resulting from specific circumstances such as traumatic brain injury or spinal cord injury. The VA system also allows you to experience a national-scope, single-payer, integrated health system. Students work on teams with interns, residents, and attendings from Boston Medical Center and Brigham and Women's Hospital and attend didactics at the VA. A car is often necessary.

Clerkship Schedules

Didactic Schedule

Sample Didactics schedule demonstrating a mix of full and half-day sessions. This sample applies to Block A only

BLOCK A Didactics Schedule				
Session Time	Day 1 Wed, April 23	Day 2 Wed, April 30	Day 3 Mon, May 5	Day 4 Mon, May 19
8:00 AM	Cardiology Based Station	Antibiotics & Fever by Dr. Serrao - INS 211		
9:00 AM	Cardiac Pex Simulation by Dr. Ananthakrishnan - EB 50			
10:00 AM	Chest Pain by Dr. Govindraj - INS 209	Heart Failure Management by Dr. Bockstall - INS 211		Inpatient Withdrawal Management by Dr. Peterkin - INS 109 AB
11:00 AM	Systematic ECG Interpretation by Dr. Bockstall - INS 214	STUDENT REPORT Group A by Dr. Ananthakrishnan - INS 211 Group B by Dr. Bockstall - INS 213	SHELF Update by Dr. Ananthakrishnan - HOU R107	STUDENT REPORT Group A by Dr. Ananthakrishnan - INS 109 AB Group B by Dr. Lowe - HOU R107
12:00 PM				
1:00 PM	STUDENT REPORT Group A by Dr. Ananthakrishnan - INS 209 Group B by Dr. Govindraj - INS 214		IPASS by Dr. Govindraj - HOU R107	Approach to Abnormal Liver Enzymes by Dr. Lowe - INS 109 AB
2:00 PM	STUDENT Chief Session - INS 209	Diabetes: In Patient & Out Patient by Dr. Ananthakrishnan - INS 211		Learning Environment Session - INS 109 AB
3:00 PM	OCRA Introduction by Dr. Ananthakrishnan - INS 209		Palpitation Case Simulation by Dr. Ananthakrishnan & Dr. Cruz - EB 50	Care of Patient with Incarceration Status by Dr. Cruz - INS 109 AB
4:00 PM			Student Report by Dr. Govindraj - HOU R107	
5:00 PM				

Didactics will take place at Boston Medical Center. There will be one full Didactic Day from 8 AM to 5 PM, varying times depending on the sessions for the day, as well as one to two Half Days. Med 1 Student Report will occur during didactics at BMC.

All conferences are available on ZOOM. Thus, students at sites other than BMC who cannot come to Boston will have access to this education due to far-off sites. All students within reasonable distance are expected to be in-person for these Didactic sessions and are to be excused from clinical duties on those days (for half days starting at 1 pm, students are to be excused by 11-1130 AM to allow for travel time) to allow time for travel. Zoom conferencing is available, and it encourages access to didactics in real-time.

Videos of many BMC-based didactics will be made available to students at all sites on Blackboard to complement didactic sessions at all other sites.

The IM Clerkship follows the **8 Week Schedule** below:

****Please note that the fourth Friday will usually be a Didactic Session from 8 AM to 12 PM. If no didactics are scheduled, students are expected to round in the morning as usual before their Wellness Afternoon. Any changes in the schedule will be communicated through the Medicine Clerkship's weekly email, the TWIM ("This Week in Medicine").**

	Monday	Tuesday	Wednesday	Thursday	Friday	Weekend
Week 1	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	ON
Week 2	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	OFF
Week 3	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	ON
Week 4	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC	Team 1: Site or BMC Round in AM Wellness Afternoon	OFF
Week 5	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	ON
Week 6	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	OFF
Week 7	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	Team 2: Site or BMC	OFF
Week 8	Team 2: Site or BMC	Team 2: Site or BMC	Unofficial Reading Day -Written OCRA 10 AM -Final Assessments (TBD)	Reading Day	MED SHELF	OFF

Daily Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
Pre-rounds 6:45-7:45	Pre-rounds 6:45-7:45	Pre-rounds 6:45-7:45	Pre-rounds 6:45-7:45	Pre-rounds 6:45-7:45
Work Rounds 7:45-11:00am	Work Rounds 7:45-11:00am	Work Rounds 7:45-11:00am	Work Rounds 7:45-11:00am	Work Rounds 7:45-11:00am
Wellness Hour 12-1pm	Wellness Hour 12-1pm	CREx/M&M Conference 12-1pm (Optional)	Wellness Hour 12-1pm	Department of Medicine Grand Rounds 12-1pm (Optional)
Patient Care and/or Small Group Learning with your CD 1-5:30pm (2 x/week)	Patient Care and/or Small Group Learning with your CD 1-5:30pm (2 x/week)	Patient Care and/or Small Group Learning with your CD 2-5:30pm (2 x/week)	Patient Care and/or Small Group Learning with your CD 1-5:30pm (2 x/week)	Patient Care and/or Small Group Learning with your CD 1-5:30pm (2 x/week)

- The actual times vary slightly by team, but the above schedule gives you a general idea

- On Weekends 1, 3, and 5: You will round with your team on either Saturday or Sunday (see Blackboard for general BMC team “rules” for which weekend day you may work, subject to change); expect to have 1 weekend day off on those weeks. They will be excused by 12pm or after rounds on the 4th Friday for a Wellness Afternoon. Students observe the same weekdays on and off as the Internal Medicine residents in order to maintain the integrity of the Medicine ward team, and for students to gain experience functioning on an inter-professional team. Thus, students will work many Monday Holidays.
- Students will generally have 2 (TWO) 4-week blocks on this clerkship (with exceptions around holiday seasons). The students have a wellness afternoon the 4th Friday afternoon starting at noon (or after rounds/didactics).
- Finally, students will complete their clinical responsibilities and be excused by 5 pm on the day prior to their reading days in week ~8 of the Medicine clerkship.

Clerkship Grading

ASSESSMENT OF LEARNING	
Clinical Grade Percentage	60%
Shelf/Exam Percentage	25%
“Other” Components Percentage	15%
CLINICAL GRADE	
Clinical Honors	>4.45
Clinical High Pass	3.45-4.44
Clinical Pass	2.00-3.44
Clinical Fail	<2.00
SHELF EXAM	
Minimum score to pass	58
OTHER	
OCRA: 1 Oral OCRA, 2 written OCRAs, 4% each	12%
Directly Observed FOCUSED H and P	3%
FINAL GRADE	
Honors	≥ 90 Total Points (this includes CSEF, shelf, additional assessments,) AND average of ≥ 3 in all CSEF domains
High Pass	≥ 80 to <90 Total Points, AND average of ≥ 2.5 in all CSEF domains
Pass	≥ 75 to <80 Total Points or between 1.50-2.49 in any domain on the final CSEF
Fail	<75 Total Points or <1.50 on any domain on the final CSEF or < 2.00 averaged on the final CSEF (Clinical Fail)
ASSESSMENT FOR LEARNING	These items must be done by the deadlines provided at orientation to be eligible to receive final grade of honors. Students will receive one standard all-clerkship email reminder. Email sample shown below.
Completing patient encounter logs by the last Sunday of the clerkship block.	
Completing all SOCS forms by the last Sunday of the clerkship block.	

<i>*These SOCS Cards and a Directly Observed H&P replace the FOCUS forms</i>	
Completing all clerkship assignments by last Sunday of the clerkship block.	
Completing mid-clerkship form in advance of the meeting at mid-clerkship, and submitting the form by the final Sunday of the clerkship block	
Requesting supervisor (faculty, resident etc.) evaluations from all evaluators must be completed by the last Sunday of the clerkship block.	
ASSESSMENT OF PROFESSIONALISM	To meet professionalism expectations students must meet the following expectations listed below:
Arriving at clerkship didactic sessions on time.	
Evaluations are requested by the last Sunday of the clerkship block.	
Reviewing and responding to e-mail requests from clerkship administration within 2 business days	
Returning borrowed clerkship materials (e.g. pager) by the last business day of the clerkship block.	
Informing clerkship leadership and supervising faculty/residents of absences in advance of the absence (barring extenuating circumstances).	
The following are also expectations of the clerkship and repeated patterns of behavior (after feedback with faculty) will be factored into the professionalism conduct component of the clerkship performance:	
Treating and communicating in a respectful manner with all members of the clerkship team, including clinical and administrative faculty and staff.	
Engaging in the core curriculum and participating respectfully with peers and colleagues at all times.	
Professional Conduct and Expectations	
Evaluation of a medical student's performance while on a clinical clerkship includes all expectations outlined in the syllabus and clerkship orientation as well as the student's professional conduct, ethical behavior, academic integrity, and interpersonal relationships with medical colleagues, department administrators, patients, and patients' families. Student expectations include those listed above in professional comportment sections .	
If there are no professionalism concerns, students will receive the following statement in their summative statement: "This student MET the administrative and clinical professionalism expectations of the clerkship."	
A <u>pattern of behavior</u> as reflected (e.g. in more than one narrative comment) in faculty/resident CSEF (clinical professionalism) and/or events noted by clerkship faculty/administration (administrative professionalism) in one or multiple areas, after providing feedback to student, will result in one of the following statements in the final clerkship evaluation:	
<ol style="list-style-type: none"> 1. This student did not meet the administrative professionalism expectations (SPECIFICS PROVIDED FROM LIST OF ADMINISTRATIVE PROFESSIONALISM BEHAVIORS) and was/was not responsive to feedback. 2. This student did not meet the clinical professionalism expectations, (SPECIFICS PROVIDE FROM CSEF DOMAIN BEHAVIORS) and was/was not responsive to feedback. 3. This student did not meet the clinical and administrative professionalism expectations, (SPECIFICS PROVIDE FROM CSEF DOMAIN BEHAVIORS) and was/was not responsive to feedback. 	
If there are professionalism concerns as detailed in the assessment of learning, assessment of professionalism, or in the CSEF, the student's final grade will be adjusted down to next grade level (e.g. a student who earns a High Pass will receive the final grade of Pass, or if a student earns a Pass, they will receive the final grade of Fail). In addition, a student with administrative and/or clinical professionalism concerns will not be eligible to receive final grade honors. An email exchange will be provided to document the professionalism concern and feedback exchanged before a summative statement is placed in the final grade. SAO dean will be cc'd to provide ongoing support.	

Sample Email Example

To:
 Cc:
 Subject:
 From: Sonia Ananthkrishnan ~ sonia.ananthkrishnan@bmc.org
 Message Size: 161 KB
 Signature: **None**
 Image Size: **Medium**

This is the current material we have turned in by each student, using BU ID. Please let us know if this information is not correct. If you still have to turn in outstanding material, please do so by designated deadlines.

BU ID	Material	Plagiarism	First Self-Plagiarism	First Peer Review	Peer Review Comments	Review Date	Grading Policy	Final Grade
1								
2								
3								
4								
5								
6								
7								
8								
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10								
11								
12								
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Standard Clerkship Clinical Grade Procedures/Policies

Clinical Evaluation Procedures

Preceptors will provide clinical evaluations that contain the “raw data” on the student’s clinical performance. You are encouraged to regularly ask for specific, timely, behaviorally-based feedback on your clinical skills from your preceptors. However, do not ask them what word grade you will get, as that is a multifactorial process of which the clinical evaluation is one component. Preceptors DO NOT determine the final “word” grade.

1. The CSEF form will be used to numerically calculate your clinical grade: 1 to 5 points (depending on which box is checked) for each domain which will be averaged to give you a final score out of 5. Categories: Needs intensive remediation (1); Needs directed coaching (2); Approaching competency (3); Competent (4) or Achieving behaviors beyond the 3rd year competency criteria (5) to get a final number in each domain. This can be rounded to the nearest number using standard rounding for the CSEF domain and this is the box that should be checked (e.g., if an average of 2.4 then the student should have needs directed coaching (2) checked off). Each CSEF will be weighted based on how long the student worked with each evaluator.

CSEF Clinical Grade Calculations should be made using the 0.01 decimal point in each domain (though the rounded number will be checked off on the final CSEF form) to give a final number.

Any average of <1.50 in any domain = an automatic fail for the clerkship

Any average of < 2.50 in any domain = an automatic pass for the clerkship and a meeting with the MEO for clinical coaching

>2.50 in all domains, standard rounding will be used

<2.00 = Clinical fail which will = a fail for the clerkship

2.00-3.44 = Clinical pass

3.45-4.44= Clinical high pass

>4.45=Clinical honors

The clinical grade will be reported in the CSEF final narrative

2. The CSEF clinical score is converted to a final 2-digit percentage that is counted towards the final grade. For example, the final CSEF clinical score average of 4.45 would get converted to 90%. The Final CSEF percentage

is used towards the final grade calculation, weighted as indicated in the table above as “Clinical grade percentage” (varies by clerkship).

3. Primary preceptors at sites with multiple preceptors will collect evaluation data from the other clinicians with whom the student works. The primary preceptor will collate this data and submit the final clinical evaluation.

Shelf Exam Failure & Remediation

If a student fails their shelf exam, they will receive an **Incomplete** for the clerkship and retake the exam at the end of the year during the remediation dates.

Students:

- Will not receive a Fail on their transcript if they pass the reexamination.
- Will not be eligible for a final grade of honors - if the final grade calculation would earn the student honors, they will receive high pass as a final grade.
- Will still be eligible to receive a clinical honors.
- Fails the reexamination, they will have Fail on their transcript and have to remediate the clerkship.

Clerkship Failure & Remediation

If a student fails a third- or fourth-year clerkship, the student will receive a Fail grade and will be required to repeat the clerkship. The grade for the repeated clerkship will be calculated based on the grading criteria outlined in the syllabus for Pass, High Pass, or Honors independent of the prior Fail. The original Fail grade will remain on the transcript. The original summative evaluation narrative will be included in the MSPE, in addition to the summative evaluation from the repeated clerkship.

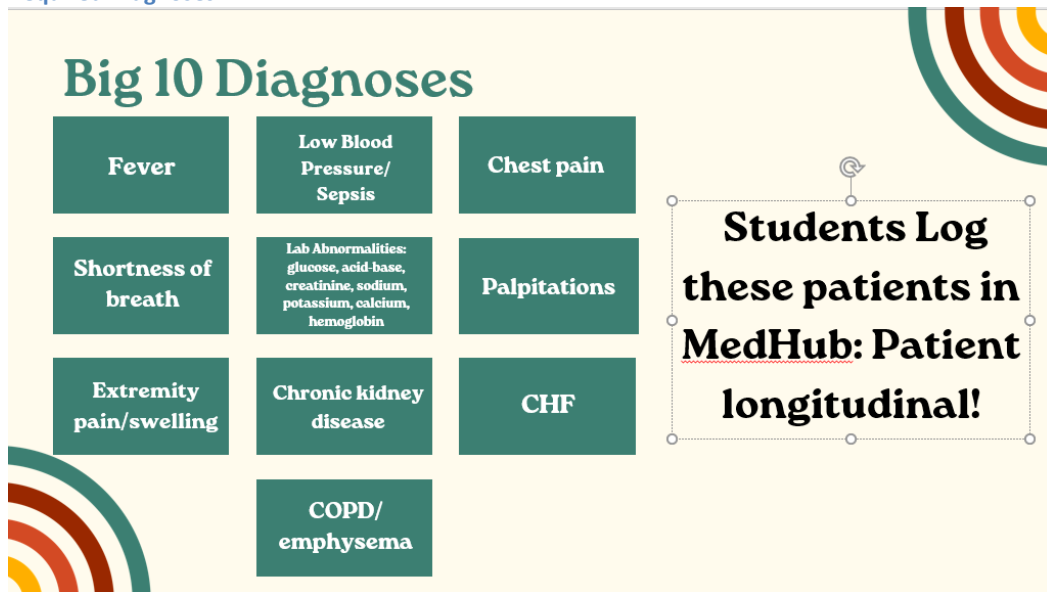
If a student fails the remediated clerkship again and the SEPC allows for another remediation, the grade for the repeat clerkship will still be calculated based on the grading criteria outlined in the course syllabus for (Pass, High Pass, or Honors). The original two failures will remain on the transcript. The repeated course will be listed again, and the word (Repeat) will appear next to both course names.

Grade Review Policy

The School's Grade Reconsideration Policy is located in the Policies and Procedures for Evaluation, Grading and Promotion of Chobanian & Avedisian School of Medicine MD Students:

<https://www.bumc.bu.edu/camed/faculty/evaluation-grading-and-promotion-of-students/>

Required Diagnoses



Formative Assessments (Medicine Clerkship Specific)

The purpose of formative assessment is to improve student learning by providing feedback on how well they are learning skills and content during the clerkship. Formative assessments are not included in the calculations of students' final grades. **On the Medicine clerkship, the Directly Observed Focused H and P counts towards this requirement.**

In addition, the Medicine clerkship has specific direct observation cards (SOCS) to be filed for review at mid/end of clerkship. Again, these forms are more opportunity for the student to obtain feedback from direct observation of skills that are specific to Internal Medicine.

FOCUS Cards and Internal Medicine Structured Observations of Clinical Skills (SOCS): These exercises are designed to assist the student in obtaining ongoing, real-time feedback after being directly observed performing a variety of skills (interviewing a patient, performing physical exam skills including 1) JVP assessment, 3) Cardiac exam, 4) Pulmonary exam). These exercises will be student-initiated and completed on the wards by residents and attendings.

Two of these cards (SOCS) should be completed by the time of the mid-clerkship feedback sessions. The Internal Medicine SOCS cards will be turned in at the end of the rotation as part of the passport.

Neither the formative assessment exercises of FOCUS cards nor the Medicine SOCS cards are included in the numeric calculations of students' final grades. However, narrative comments or other observations from these direct observations may be included in the final grade.

Process for FOCUS and SOCS Forms

(Typically, a 5-10 minute exercise)

1. The student initiates by speaking with observer (Resident, Attending, or Fellow)
2. MD or student can identify the patient
3. Hand observe the passport PRIOR to the patient encounter
4. Observation of encounter
5. Feedback on encounter
6. Observer and student sign card
7. Turn in the FOCUS card and SOCS forms as part of the passport at the end of the clerkship

Clinical Problem Solving Cases (see individual case learning objectives)

Student Report These group discussions about real patients provide exposure to clinical problems commonly encountered in medicine. These will provide a good opportunity to practice clinical reasoning and the OCRA style of thinking for commonly encountered medical problems seen on the inpatient wards.

A mini-course on interpreting the ECG –Apply a systematic approach to interpret the EKG.

Small group sessions with your Clerkship Director. These sessions focus on refining core skills and building advanced skills in:

- Write-up and oral presentations→ ~2 writeups turned in/4 week block
- Bedside rounds→ Practice interview, exam skills with a particular focus on the CV exam, Chest/Pulmonary Exam, and Volume Assessment
- Clinical reasoning practice in case-based discussions
- Integrating the medical literature into patient care
- Skills: ECG, Simulation

Observed Clinical Reasoning Assessments

Key domains of clinical reasoning include information gathering, hypotheses generating, problem representation, differential diagnosis, identifying a leading diagnosis, providing justification, and developing a management plan.

This specific assessment of clinical reasoning highlights the domains of information gathering, identifying a leading diagnosis, providing justification and developing a basic management plan.

Objectives:

- For the clinical problem(s) addressed, generate a patient-specific differential diagnosis, obtain a focused history and physical that is relevant to the differential and develop initial steps to evaluate your differential
- Explain your reasoning and describe the most important and relevant pathophysiology for the condition(s)
- Identify the most useful diagnostic tests, and interpret their results
- Recommend initial treatment

These link to the following clerkship learning objectives:

- IV. Communicate clinical information accurately and demonstrate your understanding of the patient's problems, through concise, convincing, well-organized **patient presentations, admission write-ups, progress notes, and handoffs** that are appropriately focused for the audience, purpose and time available for the communication.
- V. **Identify and prioritize your patients' problems, formulate an appropriate differential diagnosis** and outline an approach to diagnosis and management that is supported by clinical data and sound reasoning.
- VI. Demonstrate a core foundation of **knowledge** (scientific, ethical, socio-cultural) guided by the course objectives that is necessary both to provide high quality patient care and to understand advances in medicine.

Process for the Observed Clinical Reasoning Assessment (OCRA)

- There is one oral OCRA (oral exam with 1 clerkship faculty, date and time TBA and will occur weeks 4-8) and 2 written OCRAs (30 minutes each, administered via Blackboard on the final Wednesday of the Medicine rotation.
- A list of students and their assigned date of the oral OCRA will be disseminated in advance. Assigned dates will be in weeks 4-8 of the clerkship.
- This formal evaluation will be done by core clerkship faculty.
- This evaluation will take place during the 4-8th week of the clerkship, unless extenuating circumstances do not allow.
- **The student will complete the observed oral assessment (1) and written assessments (2) on the dates and times provided by the clerkship.**
- The oral and written OCRAs will each be scored from 0-100 (based on a grading rubric). Each OCRA component (1 oral and 2 written exams) is weighted at 4% of the final grade. Thus the OCRA's 3 components (1 oral and 2 written) will in total be 12% of the final grade.
- Students will be asked to sign an honor code confirming that they will not share any information about the oral and written assessments with any fellow students. This includes the problems, diagnoses, details of the cases, or the questions they are asked.
- Failure to meet the expectations outlined above will result in a reduction in the student's score, and possible failure of the OCRA component.

Fail Observed Clinical Reasoning Assessment - If the student fails only the OCRA, the student must repeat the OCRA. If the student fails a 2nd time, the student may fail the clerkship and have to retake the clerkship in its entirety.

To best prepare for the OCRA: The OCRAs are based on the Medicine BIG 10. For each of the BIG 10 diagnoses in the Medicine clerkship (see Required Patient Encounters), the student should be able to define/describe:

- Illness scripts (IS) of the Medicine Big 10 problems/diagnoses- one way that experts store information (as chunks) about medical conditions in long term memory that enables them to store and readily retrieve that information
 - An Illness Script includes:
 - Who gets the condition? What are predisposing factors
 - How does it present? Clinical manifestations- defining features
 - With regard to symptoms, signs, study results
 - Temporal aspects of the presentation- onset, course of the condition
 - Core pathophysiology
- Differential diagnosis of Medicine Big 10
- Evaluation/Diagnosis- which tests to order, when to order, how to interpret for disease related to the Medicine Big 10
- Initial management of Big 10 and related diagnoses
- Prognosis
- Prevention

Please see Blackboard for video providing specific instructions of Oral/Written OCRA (~7 mins in length).

Directly Observed FOCUSED H and P Assessment

Objectives linked to this assessment:

- Demonstrate use of patient-centered interviewing and communication techniques
- Take a clinical history that demonstrates both organization and clinical reasoning
- Perform accurate and relevant physical exam techniques
- Demonstrate a compassionate and patient-sensitive approach to history-taking and physical examinations
- Demonstrate a fund of knowledge in the clinical discipline and apply this to patient care

These link to the following clerkship learning objectives:

- I. Use proper technique to perform an accurate, appropriately detailed and organized **history and physical examination** in an efficient and sensitive manner

Process for the Directly Observed Focused H and P Assessment

- Each student will be assigned a clerkship faculty who will contact them to set up a time to observe them take a brief, FOCUSED History and Physical Exam from a patient on the wards.
- This formal evaluation will be done by core clerkship faculty.
- This evaluation will take place during the 4th – 8th week of the clerkship, unless extenuating circumstances do not allow.
- The Focused H&P will be scored from 0-100 (based on a grading rubric) and will in total be 3% of the final grade.
- Failure to meet the expectations of this assessment will result in a reduction in the student's score, and possible failure of the Focused H&P component.

Fail Directly Observed Focused H and P Assessment - If the student fails only this component of the clerkship, the student must repeat the assessment. If the student fails a 2nd time, the student may fail the clerkship and have to retake the clerkship in its entirety.

To best prepare for the Directly Observed Focused H and P Assessment: Observe residents and faculty and get observed by residents and faculty interviewing and examining patients (use the FOCUS forms) during your Medicine Clerkship.

Assignments

1. Complete, sign (along with your observer) and turn in (as part of passport) Medicine Clerkship Structured Observation of Clinical Skills Cards (SOCS)
 - a. JVP Exam
 - b. Cardiac Exam
 - c. Pulmonary Exam
2. Enter your assigned patients into the **MedHub patient encounter log** and ensure that you have seen and documented that you have seen the expected number (≥ 15) and types of patients (Big 10). Provide a paper copy for your Clerkship Director/Adviser at your feedback meetings.
3. Complete the **Observed Clinical Reasoning Assessment** (oral and written) in weeks 4-8 of the clerkship. Dates/times to be assigned.
4. Complete the **Directly Observed Focused H and P Assessment** in weeks 4-8 of the clerkship. Date/time to be assigned.
5. Participate in the **mid-point feedback** sessions and sign the feedback form confirming completion.
6. Complete and review **Preceptor Log** with your CD. Additionally, submit the preceptor log (excel sheet) to Blackboard at the end of week 4 and week 8.
7. Complete MedHub and **Department of Medicine evaluation** of the clerkship and of your supervising residents and attendings.
8. Successfully complete the **Medicine Subject ("Shelf") Exam** on the final day of the clerkship.

Optional but highly encouraged: Complete, sign (along with your observer and turn in (as part of passport) the following FOCUS forms: Interviewing and Data Gathering & Physical Exam

Recommended Texts

Textbook Reading Options

- Stern SDC. Cifu AS, Altkorn D. Symptom to Diagnosis. 4th edition. Lange Medical Books/McGraw-Hill. 2020. (BUSM Student Drive- IM folder)
- Step-Up to Medicine. 4th edition. Walters Kluwer. 2016. Read Ambulatory Medicine chapter! (BUSM Student Drive- IM folder)
- Internal Medicine Essentials for Clerkship Students. ACP/CDIM. American College of Physicians. 2015.
- Henderson MC et al. The patient history: An evidence-based approach to differential diagnosis. Lange. 2nd edition.
- Cecil Essentials

Commented [RH2]: I tried to organize this section a bit to help with legibility (bulleting, making the web links active etc) - I didn't edit text/content or reorder anything, but please make sure the way I bulleted makes sense!

Many helpful resources are FREE on the Alumni Medical Library website:

- Symptom to Diagnosis: An Evidenced based guide. 4th Edition. Scott D.C. Stern, Adam S. Cifu, Diane Altkorn (BU Student Drive- IM folder)
- Harrison's Principles of Internal Medicine. 21st edition. Joseph Loscalzo, Anthony Fauci, Dennis Kasper, Stephen Hauser, Dan Longo, J. Larry Jameson
- **Harrison's, T., Papadakis, M. A., & McPhee, S. J. (Eds.).** *CURRENT Medical Diagnosis and Treatment 2025*. McGraw-Hill Education; 2024.

Other Helpful References

- POC
 - Uptodate (Plan)
 - Dynamed
 - MGH White Book- ask your resident for access to this

<https://bugdrugdx.com/>

Longitudinal learning

- Clinical Problem Solvers (differential)
- Schema
- Illness Scripts
- <https://clinicalproblemsolving.com/resources/>
- Online Med Ed: BUSM Student Drive- M3 folder (not IM)

Reading and Other High Yield POC Resources

Calculators that prior students have mentioned are "must-haves" on this clerkship:

What are the chances your patient is having a VTE? (Venous Thromboembolism)- Calculate the Wells Score!

1. PE: <https://www.mdcalc.com/calc/115/wells-criteria-pulmonary-embolism>
2. DVT: <https://www.mdcalc.com/calc/362/wells-criteria-dvt>

For your patient with Afib- do they need anticoagulation? Assess their risk! CHADSVASC2:

<https://www.mdcalc.com/calc/801/cha2ds2-vasc-score-atrial-fibrillation-stroke-risk>

Are you evaluating a patient with chest pain? Use these to risk stratify your patient with chest pain, who MIGHT be having ACS!!

1. TIMI (for USA/NSTEMI): <https://www.mdcalc.com/calc/111/timi-risk-score-ua-nstemi>
Note- there is a different calculator for STEMI
2. Grace Score: <https://www.mdcalc.com/calc/1099/grace-acs-risk-mortality-calculator>

Need antibiotic recommendations?

- Use the BMC intranet: <https://hub.bmc.org/departments/pharmacy/inpatient-pharmacy/antibiotic-hiv-policies-and-guidelines-adults>
 - need to be on a hospital computer.

- To find this page manually- Go to BMC Intranet--> Departments--> Pharmacy--> Inpatient Pharmacy-->(left hand column) Antibiotic/HIV Guidelines--> (Scroll down to) Antibiotic Treatment Guidelines and Algorithms (and select your infection of choice)
- IDSA website guidelines resource (want to know antibiotics for bacteremia? osteomyelitis? C Diff? check here...) <https://www.idsociety.org/practice-guideline/alphabetical-guidelines/>
- Also consider: <https://bugdrugdx.com/>

Is the renal failure your patient is experiencing pre-renal or intra-renal or post-renal?
<https://www.mdcalc.com/calc/60/fractional-excretion-sodium-fena>

High Priority Conditions you should read about

In addition to the requirement that you see ≥ 15 patients as the primary student caring for the patient and seeing patients with each of the “Big 10” active problems, **it is strongly recommended** that you care for real or simulated patients with or read about the conditions described below.

The Big 10 clinical presentations (above) and diagnoses listed below represent a listing of conditions that you should prioritize in your learning. It is not inclusive of all diagnoses/conditions to learn.

For each of the conditions listed below, the student should be able to define/describe:

- Illness script (IS)- one way that experts store information (as chunks) about medical conditions in long term memory that enables them to store and readily retrieve that information
 - An Illness Script includes:
 - Who gets the condition? Predisposing factors
 - How does it present? Clinical manifestations- defining,
 - With regard to symptoms, signs, study results
 - Temporal aspects of the presentation- onset, course of the condition
 - Core pathophysiology
 - Differential diagnosis
 - Evaluation/Diagnosis- which tests to order, when to order, how to interpret
 - Initial management
 - Prognosis
 - Prevention

Keep in mind that many conditions may present in several different ways (e.g. pulmonary embolus may present with chest pain, dyspnea, syncope). The listing that follows is designed to help you organize these conditions; the categories are not mutually exclusive.

High Priority “Diagnoses” and Problems- See as many as possible and read about these problems

Chest pain

- **Diagnostic Imperatives**
 - Acute coronary syndromes
 - Pulmonary embolism

- Aortic dissection
- Effort rupture of the esophagus (Boerhaave syndrome)
- Tension pneumothorax
- **Common causes of isolated chest pain:**
 - Chronic coronary disease/angina
 - GI causes (esp. GERD, esophageal motility/spasm, peptic ulcer disease)
 - Musculoskeletal (e.g., localized, non-rheumatologic syndromes like costochondritis)
 - Psychological causes/triggers (panic disorder, depression)
 - Unexplained chest pain
- **Other**
 - Pericarditis

Dyspnea

- COPD
- Heart failure
 - Preserved ejection fraction
 - Reduced ejection fraction
- Asthma
- Pneumonia
- Interstitial lung disease
- Pleural effusion

Fever

- Bacteremia
- Clostridium difficile
- Endocarditis
- HIV- primary infection and opportunistic infections/cancers suggested by CD 4 count
- Malaria
- Meningitis/encephalitis
- Noninfectious cause
- Pneumonia
- qSOFA/SIRS/Sepsis/Severe Sepsis, is this septic shock or not?
- Skin and soft tissue infections/cellulitis
- Spontaneous bacterial peritonitis
- Tuberculosis
- Urinary tract infection

Anemia

- Fe deficiency
- Anemia of chronic disease (inflammation)
- B12, folate deficiency
- Acute blood loss
- Glucose-6-Phosphatase deficiency –G6PD

- Thalassemias
- DIC- microangiopathic hemolytic anemias
- Sickle cell trait/disease

Kidney injury

- **Acute kidney injury**
 - Prerenal
 - Hypovolemia
 - Heart failure
 - Cirrhosis with ascites
 - Intrinsic renal
 - Glomerular disease
 - Acute tubular necrosis
 - Contrast nephropathy
 - Allergic interstitial nephritis
 - Post-renal causes

Acid-base/electrolyte disorders

- Acid-base
 - Metabolic acidosis
 - Increased anion gap conditions
 - Normal anion gap conditions
 - Metabolic alkalosis
 - Contraction
 - Vomiting
 - Renal acid loss
 - Respiratory acidosis
 - Respiratory alkalosis
- Electrolytes
 - Hyponatremia
 - Hypovolemia, osmotic diuresis
 - Diuretic induced
 - SIADH
 - Adrenal insufficiency
 - Edematous states – Heart failure, cirrhosis, nephrotic syndrome
 - Renal: Acute and chronic kidney disease
 - Hypernatremia
 - Unreplaced water loss -involves loss of thirst or ability to access water
 - Decreased total body water and sodium; relatively more TBW loss than sodium: GI loss, skin loss, renal loss (diuretics, osmotic diuresis)

- Increased sodium with normal total body water: hypertonic saline, NaHCO₃ administration, mineralocorticoid excess
- Hypokalemia
 - Reduced intake
 - Increased entry into cells
 - Increased GI loss
 - Increased urinary loss
 - Diuretic
 - Mineralocorticoid excess
 - Hypomagnesemia
- Hyperkalemia
 - Increased K intake: oral, IV (blood transfusion, IVF, TPN)
 - Increased K release from cells
 - Pseudo-hypokalemia
 - Increased catabolism- tumor lysis
 - Metabolic acidosis
 - Drugs
 - Insulin deficiency (DM)
 - Reduced urinary K excretion
 - Acute and chronic kidney disease
 - Reduced secretion or response to aldosterone (ACEI/ARBs and other drugs, type 4 RTA)
- Hypocalcemia
 - Hypoparathyroidism
 - Vitamin D deficiency
 - Renal insufficiency
 - Medications
 - Hypomagnesemia
- Hypercalcemia
 - PTH dependent: Hyperparathyroidism
 - PTH independent:
 - Malignancy
 - Granulomatous disease- e.g. sarcoidosis
 - Medications – e.g., thiazides, Vitamin D intoxication, calcium

Other High Priority Conditions that do not fit neatly under one of the Big 10 categories

- Arrhythmia with emphasis on atrial fibrillation, supraventricular tachycardias, ventricular tachycardia, heart block
 - Understand causes of atrial fibrillation
- Diabetes- with emphasis on basic inpatient management of DM2, diabetic ketoacidosis, hyperosmotic hyperglycemic nonketotic state (HHNK)

- Hypertensive urgency/emergency
- Hypoxia- mechanisms, approach to..., common causes
- Substance abuse/overdose/withdrawal with emphasis on ethanol, opiates, cocaine
- Volume depletion

High priority components of the physical exam

Includes:

- Cardiovascular
- Chest/Lung
- Volume assessment

Types of Patients/Diagnoses- The Next Tier

In addition to the requirements above, we encourage you to see and read about patients with as many of the following problems, clinical conditions, socio-demographics or learning opportunities listed below:

- Acute joint pain and swelling with emphasis on crystal-induced and infectious causes
- Abdominal pain- Approach to...
- Altered mental status - e.g. confusion, delirium, dementia
- Amyloidosis
- Cancer (common solid or blood-borne)- e.g. Lung, breast, colorectal, prostate, Chronic lymphocytic leukemia, multiple myeloma
- Cough
- Chronic kidney disease
- Diarrhea- Approach to... common causes
- Gastrointestinal bleed- peptic ulcer disease, portal hypertension
- Infections
 - Due to resistant organisms- e.g., staphylococcus
 - Antibiotic stewardship
 - Immunocompromised states
 - Nosocomial infections- including pneumonia, intravascular catheter infection
 - Liver Disease- emphasizing cirrhosis and its complications
 - Pain management- approach to ...
 - Rash- approach to...
 - Sarcoidosis
 - Syncope- approach to... common causes
 - Systemic sclerosis (scleroderma)
 - Urinary tract infection- upper tract, complicated UTI
 - Valvular disease with emphasis on aortic stenosis, mitral regurgitation, tricuspid regurgitation

Session Learning Objectives and Notes

Clinical Problem Solving Cases, High Priority Reading & other Core Learning

These clinical problem solving cases span cases, workshops and didactics incorporated into the clinical clerkship.

Shelf Review with focus on evaluation of Acute Coronary Syndrome

By the end of the session, students will be able to:

- Review elements of the NBME Medicine shelf exam and the new NBME question format
- Estimate the probability that coronary artery disease is the cause of the patient's presentation with chest pain. Assess the current risk of ACS for the patient with chest pain.
- Describe the role of **stress testing** and cardiac catheterization in patients with suspected coronary heart disease

Evaluation of a patient with palpitations

By the end of the session, students will be able to:

- Generate differential diagnoses in a patient presenting with palpitations
- Recognize how age of patient helps to determine etiology of palpitations
- Recognize and list that multiple factors can contribute to palpitations in the same patient
- Review EKGs of patients presenting with palpitations

Dyspnea

By the end of the session, students will be able to:

- Formulate a differential diagnosis for acute dyspnea
- Identify the symptoms and signs of heart failure (HF)
- Distinguish between heart failure due to systolic vs diastolic dysfunction
- Identify a patient's cardiac functional status (class) and explain its significance
- Provide a prognosis for a patient with HF and identify data that predicts risk
- Articulate the principles of managing a patient with HF and describe the role of the different medication classes used to treat this disorder

Anticoagulation in the Hospitalized patient

By the end of the session, students will be able to:

- **Identify** risk factors for development of thrombosis in hospitalized patients
- **Assess** the risk of thrombotic disease
- Learn strategies to **prevent** major thrombotic events
 - DVT Prophylaxis
 - Bridging anticoagulation
- **Treatment** – Familiarize yourself with common pharmacotherapy in anticoagulation
- Understand that various factors determine choice of anticoagulation

Rough Breathing in Exam Room

By the end of the session, students will be able to:

- Define Chronic Obstructive Pulmonary Disease (COPD)
- Distinguish among Emphysema, Chronic Bronchitis and Asthma
- Describe the pathogenesis of airflow obstruction in COPD

- Appropriately order and interpret pulmonary function tests (PFT's)
- Describe the principles of managing COPD, both during an acute exacerbation and at times of symptomatic but stable disease
- Identify smoking and other causes in patients with COPD
- Develop an approach to address and assist a patient in stopping smoking

Diabetes: Inpatient and Outpatient DM2

By the end of the session, students will be able to:

- Correctly apply the diagnostic criteria for type 2 diabetes mellitus to a patient
- Describe methods and reasons for controlling blood glucose inpatient vs. outpatient
- Identify the components of a routine evaluation of a diabetic patient
- Identify inpatient interventions to control hyperglycemia

Identifying and treating the source: Pattern recognition in infectious diseases syndromes and antimicrobials: a high yield approach.

By the end of the session, students will be able to:

- Review the distinction between commensals/colonizers/normal flora and pathogenicity
- Understand the general spectrum of antimicrobials used in the inpatient and outpatient setting
- Identify the core "illness scripts" for each primary source for infections (i.e. pulmonary-Pneumonia, CNS, skin/musculoskeletal, etc.) based on demographics, HPI, physical exam and ancillary data and predict the organism and treatment options
- Review representative presentations of fever within the context of each organ source and appreciate the nuances of subtle changes in presentation to identify the etiology and treatment.

Fever and Confusion with Cirrhosis

By the end of the session, students will be able to:

- Identify and recognize the findings of advanced liver disease
- Recognize complications of chronic liver disease
- Assess the prognosis of a patient with chronic liver disease
- In a patient who presents with a change in mental status, demonstrate a mental status assessment, characterize the problem (e.g. delirium, dementia...), develop a differential diagnosis and outline an approach to evaluation
- For a patient with ascites, describe maneuvers to elicit this finding, develop a differential diagnosis for the ascites, and determine the likely cause, by utilizing findings from the history, exam and paracentesis
- Describe the spectrum of alcohol withdrawal and identify factors that put a patient at high risk for major alcohol withdrawal
- Risk stratify a patient regarding risk for alcohol withdrawal and outline initial management

In-Patient Withdrawal Management

By the end of the session, students will be able to:

- Describe withdrawal management for the most commonly used substances
- Explain the importance of inpatient withdrawal management
- Review pathophysiology of withdrawal

Pain Management and End of Life Issues

By the end of the session, students will be able to:

- Describe an approach to alleviate pain and suffering for a patient with metastatic cancer
- Demonstrate how to safely and effectively employ commonly –used medications in the treatment of mild, moderate, and severe pain
- Discuss options of care we can offer patients and their families at the end of life
- Define palliative care and hospice, and identify situations in which these approaches to care are appropriate

Social Determinants of Health

By the end of the session, students will be able to:

- Develop tools to analyze the effect of SDOH on the wards
- Develop tools to see the way SDOH affect us as healthcare practitioners
- Develop micro-aggressions response techniques

Handoffs

By the end of the session, students will be able to:

- Understand the importance of structured communication when handing off patients
- Define the components of the IPASS mnemonic
- Critically construct and observe a verbal IPASS handoff

Abnormal LFTS

By the end of the session, students will be able to:

- Develop a differential diagnosis for the following LFTs patterns:
 - Severely elevated transaminases
 - Severely elevated alkaline phosphatase
 - Mild-moderately elevated transaminases
- Assess the severity of liver dysfunction using clinical, exam, and laboratory features.

Student Report

By the end of the session, students will be able to:

- Apply clinical reasoning to real-time differential diagnosis of the patient presented using the OCRA framework
 - For the clinical problem(s) addressed, obtain a focused history and physical, generate a patient-specific differential diagnosis, develop initial steps to evaluate your differential, explain your reasoning and describe the most important and relevant pathophysiology for the condition(s)
 - Identify the most useful diagnostic tests, describe the utility and limitations of these diagnostic tests, and interpret their results
 - Determine in real-time an assessment and where applicable, a plan for the presented patient

- Identify the most important components of the context of care including: patient socio-demographics, language, culture, patient belief system and illness behavior, and the system of care (e.g. access to care, finances, care coordination)
- Describe how these factors impact patient care and clinical outcomes, and how the system might be improved or the problem prevented

Intravenous Fluids

By the end of the session, students will be able to:

- Identify the physiology of use of hypotonic vs isotonic solution
- Describe the differences between balanced crystalloids and isotonic saline
- Describe the treatment of a hypovolemic patient
- Describe the treatment of a hypovolemic patient with a severe metabolic acidosis
- Describe the treatment of an NPO patient
- Describe the treatment of a hypovolemic and hypernatremic patient
- Describe the treatment of a hypervolemic and hypernatremic patient

ECG Interpretation Sessions

By the end of the session, students will be able to:

- Apply a systematic approach to interpret the EKG
- Begin to recognize common and “can’t miss” EKG diagnoses

CD-Student Small Group Sessions

By the end of the session, students will be able to (**your small group sessions will cover some of these objectives**):

- **Bedside skills**
 - Demonstrate a focused approach to obtaining a history and performing a physical exam, based on differential diagnosis
 - Demonstrate the method and be able to provide an estimate of the patient's JVP
 - Distinguish systolic ejection murmurs from regurgitant murmurs
 - Perform a systematic CV exam using proper technique
 - Demonstrate a systematic chest/pulmonary exam and detect abnormalities
 - Describe the elements from the history, physical exam and foundational studies that will enable you to assess the patient's volume status
- **Communication skills**
 - Practice delivering a concise, targeted, coherent oral patient presentation that “makes the case” for your assessment and plan
 - Practice composing a well-organized and coherent write-up that ‘makes the case’ for your assessment and plan
- **Clinical Reasoning Practice**
 - Provide a differential diagnosis and support for your proposed conditions that is appropriate to the patient being presented

- Identify the common and “don’t miss” (diagnostic imperatives) conditions associated with presentations of Chest pain, Dyspnea, Fever, Anemia, Acute Kidney Injury and common Acid-base & Electrolyte disorders
- Describe the illness scripts for common and ‘don’t miss’ conditions that often present with: Chest Pain, Dyspnea, Fever, Anemia, Acute Kidney Injury and common Acid-base & Electrolyte disorders and how they differ
- Critically incorporate the relevant evidence (science/medical literature) into your patient assessments
- **Expectations, Feedback and Assessment review**
 - Demonstrate the ability to effectively solicit and incorporate feedback from your supervisors and improve your current performance
 - Discuss and reflect on feedback and assessments from your supervisors and work on a plan to incorporate feedback received
 - Show the actions of a self-directed learner