

Doctoring 2 Course Guide

Co Course Directors:

Christine Phillips MD
Joe Rencic MD

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GOALS AND LEARNING OBJECTIVES

INSTITUTIONAL LEARNING OBJECTIVE	MEDICAL EDUCATION PROGRAM OBJECTIVE
B - Behaves in a caring, compassionate, and sensitive manner toward patients and colleagues of all cultures and backgrounds. (Interpersonal and Professionalism)	B.1 - Apply principles of social-behavioral sciences to provision of patient care, including assessment of the impact of psychosocial and cultural influences on health, disease, care-seeking, care compliance, and barriers to and attitudes toward care. (2.5)
	B.2 - Demonstrate insight and understanding about emotions that allow one to develop and manage interpersonal interactions. (4.7)
	B.3 - Demonstrate compassion, integrity, and respect for others. (5.1)
	B.4 - Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation. (5.5)
U - Uses the science of normal and abnormal states of health to prevent disease, to recognize and diagnose illness and to provide an appropriate level of care. (Medical Knowledge and Patient Care)	U.1 - Perform all medical, diagnostic, and surgical procedures considered essential for the area of practice. (1.1)
	U.2 - Gather essential and accurate information about patients and their conditions through history-taking, physical examination, and the use of laboratory data, imaging, and other tests. (1.2p)
	U.3 - Interpret laboratory data, imaging studies, and other tests required for the area of practice. (1.4)
	U.4 - Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgement. (1.5)
	U.5 - Develop and carry out patient management plans. (1.6)
	U.6 - Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health. (1.9)
	U.7 - Demonstrate an investigatory and analytic approach to clinical situations. (2.1)
	U.8 - Apply established and emerging bio-physical scientific principles fundamental to health care for patients and populations. (2.2)
	U.9 - Apply established and emerging principles of clinical sciences to health care for patients and populations. (2.3)
	U.10 Recognizes that ambiguity is a part of clinical health care and responds by utilizing appropriate resources in dealing with uncertainty. (8.8)
C - Communicates with colleagues and patients to ensure effective interdisciplinary medical care (Interpersonal and Communication Skills; Patient Care)	C.1 - Gather essential and accurate information about patients and their conditions through history-taking, physical examination, and the use of laboratory data, imaging, and other tests. (1.2h)
	C.2 - Counsel and educate patients and their families to empower them to participate in their care and enable shared decision making. (1.7)
	C.3 - Participate in the education of patients, families, students, trainees, peers, and other health professionals. (3.8)
	C.4 - Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds. (4.1)
	C.5 - Communicate effectively with colleagues within one's profession or specialty, other health professionals, and health related agencies (4.2, see also 7.3)
	C.6 - Maintain comprehensive, timely, and legible medical records. (4.5)
	C.7 - Demonstrate sensitivity, honesty, and compassion in difficult conversations, including those about death, end of life, adverse events, bad news, disclosure of errors, and other sensitive topics. (4.6)
	C.8 - Communicate with other health professionals in a responsive and responsible manner that supports the maintenance of health and the treatment of disease in individual patients and populations. (7.3)

INSTITUTIONAL LEARNING OBJECTIVE	MEDICAL EDUCATION PROGRAM OBJECTIVE
A - Acts in accordance with the highest ethical standards of medical practice (Professionalism)	A.1 - Demonstrate responsiveness to patient needs that supersedes self-interest. (5.2)
	A.2 - Demonstrate respect for patient privacy and autonomy. (5.3)
	A.3 - Demonstrate accountability to patients, society, and the profession. (5.4)
	A.4 - Demonstrate a commitment to ethical principles pertaining to provision or withholding of care, confidentiality, informed consent, and business practices, including compliance with relevant laws, policies, and regulations. (5.6)
	A.5 - Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust. (7.1)
	A.6 - Demonstrate trustworthiness that makes colleagues feel secure when one is responsible for the care of patients. (8.5)
R - Reviews and critically appraises biomedical literature and evidence for the purpose of ongoing improvement of the practice of medicine. (Practice-Based Learning and Improvement and Medical Knowledge)	R.1 - Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patients and populations. (2.4)
	R.2 - Locate, appraise, and assimilate evidence from scientific studies related to patients' health problems. (3.6)
	R.3 - Continually identify, analyze, and implement new knowledge, guidelines, standards, technologies, products, or services that have been demonstrated to improve outcomes. (3.10)
E - Exhibits commitment and aptitude for life-long learning and continuing improvement (Practice-based Learning)	E.1 - Identify strengths, deficiencies, and limits in one's knowledge and expertise. (3.1)
	E.2 - Set learning and improvement goals. (3.2)
	E.3 - Identify and perform learning activities that address one's gaps in knowledge, skills, and/or attitudes. (3.3)
	E.4 - Incorporate feedback into daily practice. (3.5)
	E.5 - Obtain and utilize information about individual patients, populations of patients, or communities from which patients are drawn to improve care. (3.9)
	E.6 - Develop the ability to use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors. (8.1)
	E.7 - Manage conflict between personal and professional responsibilities. (8.3)
S - Supports optimal patient care through identifying and using resources of the health care system. (Systems-Based Practice and Patient Care)	S.1 - Provide appropriate referral of patients including ensuring continuity of care throughout transitions between providers or settings and following up on patient progress and outcomes. (1.8)
	S.2 - Systematically analyze practice using quality-improvement methods and implement changes with the goal of practice improvement. (3.4)
	S.3 - Use information technology to optimize learning. (3.7)
	S.4 - Work effectively with others as a member or leader of a health care team or other professional group. (4.3, see also 7.4)
	S.5 - Work effectively in various health care delivery settings and systems relevant to one's clinical specialty. (6.1)
	S.6 - Coordinate patient care within the health care system relevant to one's clinical specialty. (6.2)
	S.7 - Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care. (6.3)
	S.8 - Advocate for quality patient care and optimal patient care systems. (6.4)
	S.9 - Use the knowledge of one's own role and the roles of other health professionals to appropriately assess and address the health care needs of the patients and populations served. (7.2)
	S.10 - Participate in different team roles to establish, develop, and continuously enhance interprofessional teams to provide patient- and population-centered care that is safe, timely, efficient, effective, and equitable. (7.4)

Course Prerequisite

Completion of Doctoring 1 fall and spring, enrollment in the M2 curriculum.

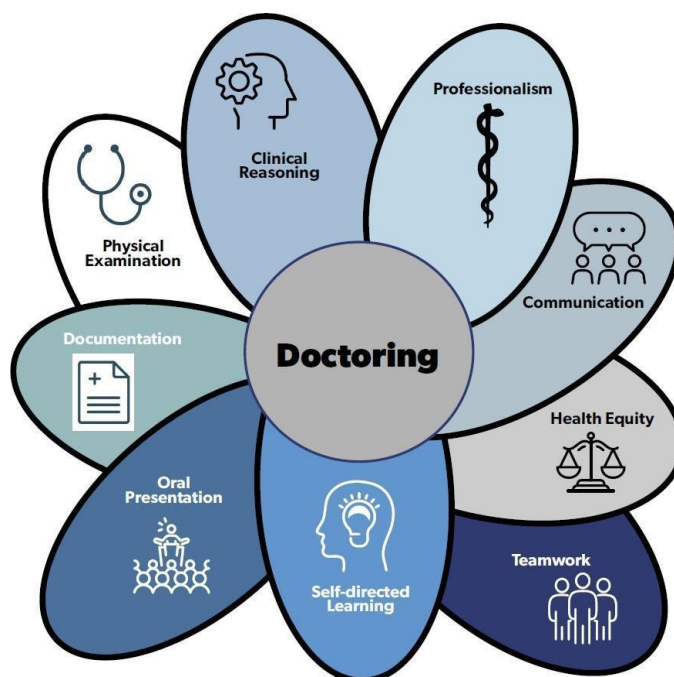
Course Description & Goals

A basic definition for doctoring is “caring for patients.” We believe the core “caring” activities of doctors are the following:

- Helping a person maximize their quality of life based on their goals
- Relieving biopsychosocial suffering
- Building relationships with your patients

Thus, the goal of this course is to help students develop knowledge, skills, and attitudes that will enable them to care effectively and compassionately for their patients. We would like you to think of doctoring as a “**relationship-centered**” practice. A relationship-centered approach has two benefits. First, doctors focus on the whole person, not just their diseases and second, strong relationships lead to trust, better adherence to care, and less provider burnout. Notice, these lead to better patient health outcomes and satisfaction, so these are not just “soft skills.” They really matter.

The schematic below highlights 9 knowledge, skill, and attitudinal domains necessary for students to achieve the previously described goals.



Doctoring 2 is a year-long course in the second year where students build off their experience from Doctoring 1. The course runs from July through March.

As previously described, the course will help students build their knowledge, skills, and attitudes in 9 performance domains. Because these domains are so wide-ranging, we will use multiple educational experiences/strategies. The course is divided into “classroom” and clinical experiences.

The classroom portions consist of Academy of Medical Educator (AME)-led small group “Doctoring” sessions and advanced skills sessions. The AME-led Doctoring sessions are structured in case-based small groups which allow students to perform clinical interviews with a faculty member or standardized patients so they can learn and practice advanced communication skills and hypothesis-driven data gathering, including advanced physical examination maneuvers. There will be significant emphasis on clinical reasoning and identifying and mitigating cognitive biases. Students will refine and expand their case presentation and note writing skills and will be introduced to the electronic medical record. Cases will promote integration of foundational and social science topics and provide opportunities for self-directed learning. Students will also have a variety of additional simulation sessions and standardized patient interviews to further their skills.

In terms of clinical experiences, they will continue their clinical placements with a longitudinal preceptor in the fall and will return to the hospital during the winter/spring to advance their clinical skills in preparation for their clinical clerkships. Students will further their teamwork skills, competence in building a therapeutic alliance with patients, and will reflect on topics surrounding professionalism, ethics, and professional identity formation.

All students are required to take the formative communication assessment and pass a standardized patient physical examination exercise, pass the clinical reasoning examination, complete all required quizzes and assignments and present complete patient workups in standard oral and written format. The course prepares students for the End of Second Year Assessment (Doctoring 2 Module 6 Assessment), a three-station clinical skills examination scheduled in the Clinical Skills and Simulation Center, and the third-year clerkships.

Course Learning Objectives	
COMMUNICATION	
Interviewing	<ul style="list-style-type: none"> Effectively open clinical encounter with patient by setting the stage and establishing rapport (B.1, B.2, B.3, B.4, U.2, C.1, A.2) Demonstrate the use of effective communication skills to achieve therapeutic and diagnostic goals (B.1, B.2, B.3, B.4, U.2, C.1, A.2) Provide closure for clinical encounter (B.1, B.2, B.3, B.4, U.2, C.1, A.2) Share information effectively with patient and family (B.1, B.2, B.3, B.4, U.2, C.1, A.2)
Building relationships	<ul style="list-style-type: none"> Demonstrate ability to establish therapeutic alliance (B.1, B.2, B.3, B.4, U.2, C.1, A.2) Discuss the patient's perspective (B.1, B.2, B.3, B.4, U.2, C.1, A.2) Perform a patient-centered physical exam (B.3, B.4, U.2, C.1) Recognize how one's own beliefs, feelings, bias, and preconceptions may influence the medical interview (A4, B1, B2, B3, B4, E1)
Data gathering	<ul style="list-style-type: none"> Gather a hypothesis-driven history (B.1, B.2, B.3, B.4, U.2, C.1, A.2)
PHYSICAL EXAMINATION	
	<ul style="list-style-type: none"> Perform a hypothesis- driven physical exam (B.3, B.4, U.2, C.1)
ORAL PRESENTATION	
	<ul style="list-style-type: none"> Present an organized, clear and hypothesis- driven oral presentation (U.2, C.1, C.5)
	<ul style="list-style-type: none"> Orally present research topics that further the groups understanding of a topic (U.2, C.1, C.5)
DOCUMENTATION	
	<ul style="list-style-type: none"> Write an organized, clear, and logical medical record SOAP note, admission note, progress note, and pre-and post-operative note (U.2, C.1, C.5, C.6)
CLINICAL REASONING	
	<ul style="list-style-type: none"> Effectively use clinical reasoning skills during patient care and while working through patient cases (U.2, U.3, U.4, C.1)
HEALTH EQUITY AND DISPARITIES	
	<ul style="list-style-type: none"> Utilize knowledge of social determinants of health to mitigate barriers to achieving equitable health for all your patients. (E5, R1)
PROFESSIONALISM	
	<ul style="list-style-type: none"> Recognize how one's own beliefs, feelings, prejudices, and preconceptions may influence the medical interview (A4, A5, A6, E1, E3, E5, E6)
	<ul style="list-style-type: none"> Demonstrate professional behavior and demeanor in all settings (B.1, B.2, B.3, B.4, C.1, C.4, C.5, C.8, A.1, A.2, A.3, A.4, A.5, A.6)
	<ul style="list-style-type: none"> Engage in the process of professional identity formation as a physician in training (E1, E2, E3, E4, E5, E6)
TEAMWORK	
	<ul style="list-style-type: none"> Demonstrate ability to work successfully on a team
SELF-DIRECTED LEARNING	
	<ul style="list-style-type: none"> Demonstrate an ability to identify and successfully meet one's own learning needs (E1, E2)

Course Contact Information

Course Directors

Christine Phillips, M.D.

Assistant Professor, Medicine

Email: christine.phillips@bmc.org

Phone: (617) 358-7477

Office Hours: Email for an appointment

Office: Medical Education Office 310, A Building 3rd floor



Joseph Rencic, M.D.

Professor, Medicine

Email: jrencic@bu.edu

Phone: (617) 358-7477

Office Hours: Email for an appointment

Office: Medical Education Office 305 B, A Building 3rd floor



Course Manager

Kerri Dooley-Lincoln

Email: kldooley@bu.edu

Phone: (617) 358-9083

Office: Medical Education Office, Left back corner, A Building 3rd floor



Melissa Egan

Email: eganm@bu.edu

Phone: (617) 358-9083

Office: Medical Education Office, Left back corner, A Building 3rd floor



Program Administrator, and Actor Program

Signature Noel

Email: snoel@bu.edu

Phone: (617) 358-7664

Office: Medical Education Office, Left back corner, A Building 3rd floor



Blackboard Website: <http://learn.bu.edu> > MS 214 Doctoring 2

Academy Medical Educators

- See Blackboard site to find your AME and their contact information

Clinical Experiences Contact Information

Longitudinal Preceptorship:

Melissa Egan

Email: eganm@bu.edu
 Phone: (617) 358-9083

Clerkship Prep:

Boston Medical Center Site Coordinator:

Melissa Egan
 Email: eganm@bu.edu
 Phone: (617) 358-9083

West Roxbury VA Site Coordinators

Gabrielle VanSpeysbroeck, M.D.
 Email: Gabrielle.Vanspeybroeck@va.gov
 Address: 1400 VFW Parkway, W. Roxbury
 Cell phone: 857-407-8584

Sophia Korovaichuk, M.D.
 Email: Sophia.Korovaichuk2@va.gov
 Address: 1400 VFW Parkway, W. Roxbury
 *** Cell Phone: 857-356-5014 (**Emergency/Urgent issue phone #**)

VA Credentialing specialist:

Ms. Laura Muckerheide
 Email: Laura.muckerheide@va.gov
 Phone: (857)203-6942; (857) 203-6856

Course Improvement and Feedback

Recent Changes to the Course

Doctoring 2 has undergone significant changes over the past several years thanks to valuable feedback from our students. We have significantly expanded the teaching of clinical reasoning. We have enhanced our physical examination curriculum by using evidence-based teaching strategies and including more simulation exercises (e.g., Sim scopes) to improve students' ability to pathological findings (e.g., murmurs). AMEs have received additional faculty development to improve their ability to teach physical examination effectively. We have worked on enhancing the longitudinal preceptorship and clerkship preparation clinical experiences through faculty development and the addition of 4th year student preceptors for the latter. Based on feedback from prior classes, students feel much more prepared for their 3rd year clerkship rotations based on these changes.

Curricular Committee Representatives

The Medical Education Committee (MEC), Preclerkship Curriculum Subcommittee (PCS), Clerkship Curriculum Subcommittee (CCS), and Electives Curriculum Subcommittee (ECS) each include two student representatives from each academic year, one voting member, and one alternative member, for a total of eight student representatives on each committee. Information about current membership is available on the website at:

<https://www.bumc.bu.edu/camed/education/medical-education/medical-education-committees/>

Student Advisory Committee (SAC)

To respond to medical students' concerns in a timely fashion and to allow for student-faculty dialogue about the course, a Student Advisory Committee will be convened for 1-hour meetings 3-4 times per year. We expect students and faculty to demonstrate openness to each other's ideas and to have a solutions-oriented focus. Details will be posted on Blackboard. All students are encouraged to bring any concerns (whether about the course, lectures, online materials, or interview exercises) to one of their SAC representatives or curriculum committee representatives.

Diversity, Equity, and Inclusion Initiatives

Diversity, Equity, and Inclusion is of utmost importance at the Chobanian & Avedisian School of Medicine. Below are the multiple initiatives and groups we have at the school. Our pre-clerkship faculty and students created the following website last year and continue to work on faculty development related to inclusive language.

- Education Resources and Initiatives for Inclusivity: <https://www.bumc.bu.edu/dei-classroom-resources/>
- Racism in Medicine Vertical Integration Group: <https://www.bumc.bu.edu/camed/education/medical-education/medical-education-committees/working-groups/#rimvig>
- General & Sexual Diversity Vertical Integration Group: <https://www.bumc.bu.edu/camed/education/medical-education/medical-education-committees/working-groups/#gsd>
- For Doctoring 2 specifically, we have incorporated a session on addressing microaggressions and being an ally to a student who has experienced a micro- or macroaggression. We also have a session on immigrant and refugee health to help students understand the healthcare challenges of this specific patient population.

Course Schedule

Doctoring 2 has a complicated schedule so please pay close attention to the Blackboard weekly schedule and the google calendar for the list of important dates for the course.

The most important resource for knowing your schedule is the Doctoring 2 Blackboard "Week at a glance" or the consolidated schedule.

- This will give you an overview of the activities for the week, including your Doctoring small group, special clinical skills sessions, actor communication sessions, longitudinal preceptorship, clerkship prep, assignments, and assessments. All schedules are linked in the week at a glance grid.
- The blackboard site will list required pre-work and the assignments that must be completed each week.

However, make sure you also look at your specific schedule on Blackboard, which will tell you when Doctoring 2 activities are occurring for you.

- Your classmates do not necessarily have the same schedule as you so do not rely on them to tell you what you are doing and where you should be on a given day.

Instructional Design

Students will be assigned to yearlong afternoon sessions with the Academy of Medical Educators (AME) and additional clinical experiences. These afternoons are comprised primarily of small group sessions taught by your AME. In addition, you will spend 4-5 sessions (total of 15 hours) with your longitudinal preceptor in an ambulatory clinical experience and 6 sessions (4 hours each) with a 4th year medical student and faculty member in an inpatient clinical experience. Additionally, students will have sessions using simulators, live models, and standardized patients to identify physical examination abnormalities, like abnormal cardiopulmonary sounds and ascites. Students will also perform a motivational interview technique known as the brief negotiated interview regarding substance use problems and practice more advanced communication skills regarding delivering bad news, PEARLSS, and teach back. There will be specialized sessions in clinical reasoning. Occasionally, students may participate in evening or Friday afternoon educational activities, depending on instructor or standardized patient availability.

During the year, the small group sessions will focus on advanced communication skills, clinical reasoning skills, documentation skills (both by hand in and in electronic medical record) and presentation skills.

There are block experiences that start with the fundamental skills of patient examination and progress through the performance of a complete history and physical examination; and a series of reinforcing experiences that broaden and enhance the required skills. There is more in-depth information available for Doctoring 2 on Blackboard. (<https://learn.bu.edu>)

Experiences

Small group Sessions with Academic Medical Educators (AME): Students will continue to learn to systematically analyze clinical cases in a small group scenario with other students and one faculty facilitator to advance their clinical reasoning skills. Students will integrate knowledge from other courses, independent research, and information gained from group collaboration to achieve a comprehensive understanding of a clinical case. In addition, students will progressively develop clinical reasoning skills of building hypothesis driven differential diagnoses and clinical plans for these case patients. Students will gain experience collaborating with colleagues respectfully, preparing them for similar experiences in clinical practice.

Students also meet in their AME small groups to review the basic physical examination skills

learned in Doctoring 1 with some addition of more advanced hypothesis driven physical exam maneuvers. There are required readings and selected videos to prepare for each session and a detailed Doctoring 2 checklist outlining what techniques students will be expected to perform. Upon completion of these sessions, students should be acquainted with the key parts of the physical examination and should begin to be able to conduct an examination on their own. We realize that learning the physical exam while examining a co-student may be challenging for some students, so we have asked students to identify a partner before the start of the course to work with in pairs for the physical examination skills. Students will be instructed on the appropriate attire for these sessions and privacy will be maintained in the Clinical Skills and Simulation Center (CSSC) or with privacy dividers.

In addition, any student with medical accommodation should contact Dr. Phillips at the start of the course to arrange for alternative instruction.

The AME small groups also allow a focus on teaching advanced communication skills, clinical reasoning, and reinforcing advanced physical exam maneuvers. The design of the cases will teach students how to take a hypothesis-driven history, and how to do a hypothesis-driven physical exam. Students will generate prioritized differential diagnoses, will examine likelihood ratios, and will generate illness scripts and review common presentations for Core Presentations. Students will examine and attempt to mitigate bias in clinical reasoning. Students will practice case presentations, practice documenting in an electronic medical record, and will submit case write-ups.

Longitudinal Preceptor: Students arrange to spend 3-5 sessions (15 hours total) with a longitudinal preceptor. This may be in person with the appropriate PPE at the preceptor's discretion. There may be some sessions done via telemedicine. These sessions will permit further practice and refinement of history and physical examination skills, (yes, even done via video visits).

Clerkship Prep: Students will spend six half days practicing the focused and complete history and physical exam with patients in the inpatient setting. Students will also practice presenting the patients they have seen using standard medical vocabulary, clinical reasoning (e.g., generating and justifying a differential diagnosis), and writing notes. Six complete workups (including interview and physical exam, case presentation, and write-up) are required of all students. After being corrected by the instructor, the write-ups must be submitted to MedHub within one week of the last Clerkship Prep session.

Advanced Skills Sessions:

Pediatrics (Pedi): Students will have some sessions of the AME small groups devoted to Pediatrics. These sessions focus on learning the special aspects of data collection that pertain to infants and children. Upon completion of these sessions, students will have begun to appreciate the techniques for interviewing families and applying the bio-psycho-social approach to solving patients' problems. In addition, they will learn the aspects of the history and physical exam as it pertains to a newborn, toddler, or teenager.

Students will spend one session in each of the following exercises:

Brief Negotiated Interview for Substance Use (BNI): In this afternoon small group AME seminar students will be introduced to the brief negotiated interview (BNI); a form of motivational interviewing used to counsel patients who have unhealthy substance use. The seminar will use ARS questions, short video clips, live interviews, and skills practice simulation in small groups, to enhance student skills

Eye Session: This hands-on session is taught by the Ophthalmology Department.

ENT Session: This hands-on session is taught by an otolaryngologist.

Self-directed Learning

Optional CSSC Sessions

There are opportunities for students to practice their clinical skills in the CSSC.

SEE APPENDIX 1 FOR LEARNING STRATEGIES AND OPTIONAL EDUCATIONAL RESOURCES FOR THE COURSE.

Equipment Needed

The equipment required for this course is

- Doctor's bag (backpack is fine)
- Diagnostic kit = Oto-ophthalmoscope (make sure to charge it before required sessions)
- Sphygmomanometer
- Stethoscope
- Flexible ruler, transparent, plastic, pocket size
- Reflex hammer
- Tuning forks with dampeners--128 cps and 512 cps
- Several tongue depressors (available in OME and CSSC)
- Cotton-tipped applicators (for sensory testing, available in OME and CSSC)
- At least two of the following (to be used in testing sense of smell): clove, cinnamon, vanilla, peppermint, soap, or coffee.
- White coat, name tag, appropriate dress in clinical settings (e.g., professional attire). You will see patients in most sections of the course, so when in doubt, dress as if it is a clinical encounter.

(Note: each Session overview will advise on what to wear.)

Assessment and Grading

Course Modules

In Doctoring 2, like Doctoring 1, there are 3 modules. Each module has various formative assessments for learning and summative assessments (assessments for performance evaluation). The most important and valuable assessment feedback that you will receive is:

Narrative formative feedback from your AME at module 5's end so you will know your areas of strengths and weaknesses and can work on those in module 6

Narrative summative feedback from your AME at the end of module 6

Formative feedback on your clinical skills from your LP and clerkship prep preceptors

Formative feedback from each end-of-module assessment on the various clinical skills that you learn in doctoring from your AMEs and standardized patients

Course Grading Policy

Students will receive a Pass (P) or Fail (F) for this course. Students who fail the course will be required to retake the course.

Domain	Assessment of learning	Assessment for learning	Professionalism
Pass	$\geq 70\%$	$\geq 80\%$	$\geq 80\%$ completion (peer assessment and course evaluation); 100% attendance (unless excused absence)
Fail	$< 70\%$	$< 80\%$	$< 80\%$ of above; $< 100\%$ attendance (unless excused absence)

FINAL GRADE

Doctoring 2 is a Pass-Fail course but students must complete all activities, assignments, and receive a score $> 70\%$. The key clinical skills that you need to demonstrate competence in are:

Communication Skills/Relational Competence (rapport building)

Data Gathering

Physical Examination Skills

Case Presentation

Written Documentation

Clinical Reasoning

To pass, students must attend all sessions, act professionally, complete all on-line and written work in a satisfactory and timely fashion, take and receive feedback on module 4, 5, and 6 assessments.

Professional behavior is also required to pass the course (see box below).

Additional Requirements to Pass the Course: PROFESSIONALISM

You must attend all mandatory sessions unless excused and complete required assignments promptly. Students with unexcused absences, consistently poor write-ups, serious comportment issues, incomplete work without excuse, or those who are unable to improve their grade on an exam or on a standardized patient exercise, will receive a failing grade. In addition,

- If significant and/or recurrent professionalism issues occur, you may be referred to the SEPC for professionalism and may fail the course.
 - These issues include but are not limited to engaging in unethical behaviors such as cheating on examinations, quizzes, or other assignments, signing peers in for mandatory sessions, requesting peers to sign them in for mandatory sessions, misrepresenting participation in required classes or assignments in other ways, failing to complete assignments in a timely manner, and failure to respond to repeated emails from course directors.
- Also applicable to professional behavior in Doctoring-2 is the following Chobanian & Avedisian School of Medicine policy statement on Ethical Behavior for Examinations
 - During exams and as you are leaving, refrain from any conversation with your peers while in the L-11 testing space (including within the vending room and elevator waiting area) until you are on the elevator.
 - Do not seek or receive copies of the examinations
 - Signing in classmates for mandatory sessions is considered cheating and violations will be referred to Medical Student Disciplinary Committee
 - If you are aware of any violations of the ethical standards listed above, within the Student Disciplinary Code of Academic and Professional Conduct, or otherwise, report it to the Course Director

SEE THE NEXT PAGE FOR GRADING COMPONENTS.

Here are the components of your grade broken down by percentage.

	Assessment of Learning (summative points)		Assessment for Learning (formative points)					Assessment of Professionalism		
	D2M4A, D2M5A, D2M6A	Notes & Presentations AME Core Educator & AME evaluations	Clinical Experience (#LP hours and 4 CP sessions), Written Note Uploaded on Time, LP and CP Preceptor Evaluation	KSA Completion on Time	Research Presentation (PICO)	Reflections Completed on Time	Notes and Presentations for self-assessment, or AME Core Educator and Clerkship Prep Preceptor	Peer Assessments	Course Evaluations	Attendance
Module 4										
Week 1				1	1		3			
Week 2			3	1						
Week 3			3	1						
Week 4			3				6 (3 for note, 3 for presentation)			
Week 5			3	1						
Week 6		3	3	1						
Week 7			3 (note)							
Week 8	8					3				
M4 Total	8	3	18	5		3	9			
Module 5										
Week 1			3	1						
Week 2			3	1			3			
Week 3			3	1						
Week 4		3 (note) and 3 (Case presentation)=6	3	1						
Week 5			3	1						
Week 6			3							
Week 7										
Week 8	8					3				
M5 Total	8	6	18	5	0	3	3			
Module 6										
Week 1				1						
Week 2			1	1			3			
Week 3				1						
Week 4			1	1			3			
Week 5		3 (note); 3 (case presentation)	1				3			
Week 6			1			3	3			
Week 7			1				3			
Week 8			1		1		3			
Week 9										
Week 10	8					3				
M6 Total	8	39 (AME summative evaluation); 6 (notes/presentations)	6	4	1	6	18			
OVERALL TOTAL	24	57 (39- AME; 15 - notes/presentations)	42	14	2	12	30 for Clerkship Prep and 0 pts for AME formative feedback	80% completion by end of Module 6	80% completion by end of Module 6	100% of Sessions

Total Points: 78
PASS: 70%

Total Points: 100
PASS: 80%

Grading details:

AME evaluation

- Given that your AME will have worked with you the most this year, their evaluation will count most in terms of your final grade. They will assess your interviewing/communication skills, physical examination skills, clinical reasoning, presentation, and documentation skills, and professionalism.

Objective Structured Clinical Examinations (OSCEs)*

Doctoring 2 Module 4 Assessment (D2M4A)- August

This examination will consist of standardized patient stations, a written examination that tests your knowledge of important physical examination concepts, and a practical station where you need to identify abnormal physical exam findings using Sim scopes and other media. In general, you are not required to retake the assessment if you fail but we reserve the right to ask you to do so in specific circumstances.

Doctoring 2 Module 5 Assessment (D2M5A)- October

This examination will assess your communication skills focusing on the brief negotiated interview and the effective use of PEARLSS (for challenging patient interactions), Motivational Interview techniques, and Teach Back. In general, you are not required to retake the assessment if you fail but we reserve the right to ask you to do so in specific circumstances.

Doctoring 2 Module 6 Assessment (D2M6A)- January/February

This is a summative examination that will consist of 3 standardized patient stations. You will need to elicit a focused history, perform a focused physical examination, counsel the patient, and write a note documenting your findings and your clinical reasoning. If you do not pass any domain, you will be required to receive additional coaching in that domain. In general, you are not required to retake the assessment if you fail but we reserve the right to ask you to do so in specific circumstances.

Clinical Reasoning Examination- January

This is a summative examination that will consist of a written examination and 4 computer-based, simulated patients on an application called NEJM Healer. In general, you are not required to retake the assessment if you fail but we reserve the right to ask you to do so in specific circumstances.

*Full details provided on Blackboard 1 month prior to the examination

Clinical experiences

Longitudinal preceptor evaluation

Your preceptor will assess you on your interviewing/communication skills, physical examination skills, clinical reasoning, presentation, and documentation skills, and professionalism.

Clerkship preceptor evaluation:

Your preceptor will assess you on your interviewing/communication skills, physical examination skills, clinical reasoning, presentation, and documentation skills, and professionalism.

Assignments:

KSAs

You must complete weekly KSAs that help you apply and retain the knowledge and clinical skills taught in the course. These count for only a small part of your grade.

Longitudinal Preceptorship Note

Your longitudinal preceptor will provide formative feedback on one of your notes based on the IDEA note evaluation rubric. The rubric can be found in Blackboard resources for documentation.

Clerkship Prep Notes and Presentation: Your clerkship prep preceptor will grade your note based on the IDEA note evaluation rubric and the case presentation rubric. These rubrics can be found in Blackboard resources for documentation and case presentation.

Remediation

There are three main reasons for required remediation in doctoring

Failure of any domain on the D2M4A, D2M5A, or D2M6A

AME recommends remediation.

Severe professionalism issues that are not addressed despite repeated requests from AME

and/or course directors

Required remediation does not mean failure of the course. If you obtain over 70% total for your grade, you will pass the course, but you will still need to remediate the domains in which you did not demonstrate competence.

Note: Even if you fail a domain on one of the assessments (D2M4A, D2M5A, or D2M6A), it will not go on your transcript.

Grade Appeals

According to section 2.2 in the [General Policies Governing Student Evaluation, Grading, and Promotion](#), a student who chooses to appeal a regular (i.e., not remediated) grade must follow these procedures:

- Submit a written grade appeal to the Module or Co-Course Directors no more than 15 business days after the date on which the grade is officially recorded in the Registrar's office.
- The Module or Co-Course Director must provide a written decision to the appealing student within 30 calendar days of receipt of the appeal.

Reporting Grades

Pass-Fail grades for medical students are reported to the Student Affairs Office and the Medical Education Office for tracking purposes. Any student who does not pass an assessment will have this information shared with their advisor to provide academic support.

Expectations

1. Refrain from any conversation with your peers while in the testing space, including within the vending room and elevator waiting area
2. Do not seek or receive copies of assessments
3. Signing in classmates for sessions is considered cheating and violations will be referred to Medical Student Disciplinary Committee
4. If you are aware of any violations of the ethical standards listed above, within the Student Disciplinary Code of Academic and Professional Conduct, or otherwise, report it to the Course Director

Course Roles and Responsibilities:

The Doctoring Course Directors, AMEs, other teaching faculty, and Course Managers are committed to the success of every student in the class.

Co-Course Directors

- Ensure delivery of Doctoring 2 course/module objectives
- Oversee curriculum content throughout the course and ensure deliberate spiraling and interleaving. Meet with AMEs to ensure adherence to MEO policies, instructional design expectations, and MEC recommendations.
- Review EQI data with AMEs and provide feedback and suggestions for improvement.

- Work with the SAC and review student feedback on an ongoing basis and suggest improvements.
- Meet with students who are having academic difficulty.
- Work with the Academic Enhancement Office to recruit and schedule group tutoring/coaching for the modules.
- **Will respond to email from students within 24 hours on weekdays and 48 hours on weekends unless student writes URGENT in subject line which is reserved for students experiencing a personal emergency.**

Course Managers and Program Administrators

The Course Manager and Program Administrators are responsible for the administrative and organizational support of Doctoring

- Assist course directors (CD), AMEs, and clinical preceptors with:
 - creating schedules
 - recruiting, contacting, and coordinating personnel (lecturers, tutors, teaching assistants/facilitators, proctors).
- Prepare self-learning guides, content, and knowledge self-assessments for Blackboard
- Provide knowledge self-assessment data to module directors in real time.
- Proctor assessments
- Manage all grade and evaluation data for the course
- Act as a liaison between faculty and students, field questions and concerns.
- Will respond to email from students within 24 hours on weekdays and 48 hours on weekends.

AMEs

Support the student group and assisting with session format and flow

Assess student participation

Assess and provide feedback on communication, interview skills, physical exam, and clinical reasoning skills

Guide and provide feedback on case presentation skills

Provide feedback on write-ups in a timely and thorough fashion

Creating an environment conducive to learning

Providing formal written evaluation of students through MedHub

Clinical Skills Instructors/Preceptors

Cover the learning objectives during their sessions

Demonstrate some interview and a wide variety of physical examination techniques

Assess and provide feedback on communication, interview skills, and physical exam skills

Guide and provide feedback on presentation skills

Provide feedback on write-ups in a timely and thorough fashion

Acting as a role model for patient interactions

Providing formal written evaluation of students through MedHub

Students

ATTENDING ALL SESSIONS- This is a clinical course in which instructors and patients are expecting you. As in the third-year clerkships, all sessions are mandatory. If illness or other circumstance prevents you from attending, please contact instructor AND the Office of Medical

Education

Behaving professionally (BEING ON TIME for all sessions, dressing appropriately for the setting, and showing respect for faculty, patients, staff, and other students)

Completing and submitting assignments ON TIME, including KSAs, written notes, and case presentations, unless you have an excused reason

Reviewing the corresponding links/information on Blackboard well in advance of each session

Completing any preparatory assignment before class

Keeping track of standardized patient sessions and other sessions scheduled at off-times

Planning transportation in advance for all distant sessions (Checking time and directions, arranging a carpool, etc.)

Keeping their diagnostic kit always charged and bringing their diagnostic equipment to sessions as directed

Refrain from using pagers, phones, and laptops during patient interview sessions and didactic sessions unless your faculty member allows it, or it is an emergency situation.

This includes, but is not limited to, texting and emailing during these sessions.

Turn cellphones and pagers off in class

Wear your white coat during patient interview sessions, unless told otherwise

Not discussing personal information that you learn about a patient or a classmate outside of the context of the learning session

Asking questions

Eliciting feedback on your clinical skills from instructors

Identifying clinical skills in which you feel weak and addressing them (by reading, reviewing on-line materials, addressing with your instructor, coming to a skills clinic, or practicing with a friend)

Instructional Tools

Blackboard

Each of the Doctoring 2 modules has a Blackboard Ultra site, located at <http://learn.bu.edu>. We will post module specific schedules, learning materials, assignments, along with module specific information on grading.

Students with questions about the Blackboard site or find they do not have access to it should contact the Course Director or Course Managers for help.

Piazza

Piazza is a platform to efficiently manage class Q&A about material and content being taught in the course. Students can post questions and collaborate to edit responses to these questions. We expect students to answer each other's questions before faculty answer questions. Faculty and/or course managers/program managers will answer within 24 hours and correct any incorrect responses but will encourage peer learning. **Piazza is not intended for general questions about the course or questions specifically intended for course directors or administration.** General questions should be emailed to the course director(s). Responses to the entire class will be made through Blackboard for general questions when appropriate.

MedHub

MedHub provides Chobanian & Avedisian School of Medicine students with the ability to evaluate and provide feedback on all courses within the School of Medicine, monitor their own learning progress and achievement of objectives, and view and update their student portfolio.

<https://bu.medhub.com/>

Instructional guides for MedHub can be found at:

<https://www.bumc.bu.edu/MedHub/medhub-resources/>.

Additional help resources are also available within MedHub, under the “Help” tab.

Please see the [Student Evaluation Completion Policy](#) section below for expectations around student-submitted course and faculty evaluations.

Note Taking and Studying Tools

The Alumni Medical Library has compiled some recommended tools for students looking to take notes and study digitally, including resources to help reduce eye strain or fatigue.

A list of their recommendations can be found on their website:

<https://www.bumc.bu.edu/medlib/portals/camed/pdfutilities/>

Saving a Blackboard Ultra Document as a PDF:

https://learn.bu.edu/ultra/courses/_87881_1/outline/file/_10882091_1

Echo360/Technology

Echo360 may only be used for streaming captured lecture videos; the videos may not be downloaded. Taking smartphone or digital pictures or videos of any part of the lecture in class, or at home, is similar to downloading and is not allowed. There are several reasons for this, including that students and/or the University may be liable for violations of federal copyright and privacy laws as a result of the use of copied material.

If you experience any technical problems, please report the issue in one of the following ways to generate an IT ticket:

- **Echo360 Related Issues:** Create a ticket on the Ed Media site (<http://www.bumc.bu.edu/bumc-emc/instructional-services/echo360/>): sign in and provide pertinent information that will enable an effective response. Have a link to the problematic video ready to copy/paste into this form.
- **Educational Technology Related Issues:** For assistance with technology supported by BUMC's Educational Media (e.g., ExamSoft), tickets can be created via their website at: <http://www.bumc.bu.edu/bumc-emc/instructional-services/report-an-educational-technology-issue/>
- **Other Technology Related Issues:** For assistance with BU-wide technology, such as Blackboard, email an example (e.g. picture or very brief phone video) to ithelp@bu.edu with a descriptive subject line and give as many details as possible on the what, where, how you are using the service and what type of computer, browser, etc. along with type of student (i.e. M3). Always include link(s) to or screen shots of where the issue is occurring.

- **Policy on Classroom Recordings:** <https://www.bumc.bu.edu/camed/education/medical-education/policies/classroom-recordings/>

Student Support Services

Academic Enhancement Office

The Academic Enhancement Office (AEO) supports the academic and personal success of all medical students. Recognizing that individual students have different needs to be successful in medical school, various programs and services are available to all current Chobanian & Avedisian SOM medical students. Programs are designed to help students adjust to the rigors of medical school and strive to learn balance, with more effective study habits that promote and sustain lifelong learning. Through small group sessions and individual meetings, we work with students to leverage the necessary skills to balance academic and personal growth.

<https://www.bumc.bu.edu/camed/student-affairs/office-of-academic-enhancement/>

Tutoring

Currently, peer tutors are not available for Doctoring modules, but we are exploring this possibility. If things change, we will let you know. If this service does become available for Doctoring, peer tutors may be requested via the Academic Enhancement Office's Peer Tutoring Program at: <https://www.bumc.bu.edu/camed/student-affairs/office-of-academic-enhancement/academic-enhancement/peer-tutoring-program/>

Disability & Access Services

Students who wish to request accommodations for learning at Chobanian & Avedisian School of Medicine can do so through Disability & Access Services. Information about the process is available on the Academic Enhancement Office's page:

<https://www.bumc.bu.edu/camed/student-affairs/office-of-academic-enhancement/accommodations-for-learning/>

Disability & Access Services' goal is to provide services and support to ensure that students can access and participate in the opportunities available at Boston University. In keeping with this objective, students are expected and encouraged to utilize the resources of Disability & Access Services to the degree they determine necessary. Although a significant degree of independence is expected of students, Disability & Access Services is available to assist should the need arise.

<https://www.bu.edu/disability/accommodations/>

General Student Policies

Attendance & Time off Policy

This policy addresses the expectations for student attendance and the procedures for requesting time off.

The attendance & time off policy is located at:

<https://www.bumc.bu.edu/camed/education/medical-education/policies/attendance-time-off-policy/>

Work Hours Policy

Chobanian and Avedisian School of Medicine and its curriculum committees have developed and implemented policies regarding the amount of time students spend in required activities during the first two years of medical school and the total required hours spent in clinical and educational activities during clinical clerkships.

<https://www.bumc.bu.edu/camed/education/medical-education/policies/work-hours/>

Medical Student Disciplinary Code of Academic and Professional Conduct

The School of Medicine expects all students to adhere to the high standards of behavior expected of physicians during all professional and patient care activities at the school and all its academic affiliates. All students must uphold the standards of the medical profession. This includes, but is not limited to, being respectful of patients, staff, members of the faculty, their peers, and the community, being aware of the ways in which their conduct may affect others and conducting themselves with honesty and integrity in all interactions.

Students must also adhere to the highest standards of academic honesty and professional conduct in their coursework.

<https://www.bumc.bu.edu/camed/about/diversity/prs/medical-student-disciplinary-code/>

Medical Student Disciplinary Code of Academic and Professional Conduct

The Student Disciplinary Code is located at:

<https://www.bumc.bu.edu/camed/about/diversity/prs/medical-student-disciplinary-code/>

Policies and Procedures for Evaluation, Grading and Promotion of Chobanian & Avedisian MD Students

This is a school-wide policy and can be located at:

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

Assessment Policies

A student who is unable to take a scheduled Doctoring assessment (e.g., D2M4,5,6A, clinical reasoning examination) due to medical or family emergency must immediately notify the course manager, course director(s) and the Associate Dean of Medical Education at prgarg@bu.edu. Students should arrange directly with the course manager and the Dean for Medical Education to take make-up Doctoring assessments due to acute illness or emergency that can be made up at the next available date. If the assessment cannot be taken at the next available date, the student will meet with the Associate Dean of Medical Education. Student Affairs will be notified if student needs additional support.

- Exams/OSCEs are not to be postponed or taken early, unless for a compelling reason, e.g., personal illness or family emergency, or if approved by the Associate Dean of Medical Education

- Students must meet with the Associate Dean of Medical Education for any late or missed exams that were not previously excused.
- Students who arrive late may take the Doctoring assessment or exam with remaining time, at the discretion of the course director(s)
- Students who miss a Doctoring assessment or exam, unexcused, will receive a zero for that assessment or exam

The full policies can be found here:

- Assessment/Exam Policies for Medical Students: <https://www.bumc.bu.edu/camed/education/medical-education/policies/exam-policies-for-medical-students/>
- L-11 Testing Center Policies: <https://www.bumc.bu.edu/camed/education/medical-education/policies/l-11-testing-center/>

Student Evaluation Completion Policy

The school considers the completion of course and clerkship evaluation to be part of a student's professional responsibilities and essential feedback for the ongoing monitoring of the learning environment. To obtain adequate feedback, all students must complete at least 80%, per academic year, of their assigned evaluations of courses, modules, faculty, clerkships, and clinical sites. To obtain actionable feedback, evaluations must be submitted via MedHub within 10 business days of the completion of the module/course. Students are highly encouraged to complete evaluations after the completion of assessments or exams (e.g., D2M5A, D2M6A). When possible, faculty will provide time after an assessment or examination to complete evaluations. Evaluations not completed within 10 business days will be automatically removed and no longer available for completion by the student.

The Medical Education Office monitors compliance rates multiple times a year and formally notifies students of their compliance rate twice a year. Students will be notified of delinquent evaluations 48 hours before they expire via a MedHub notification. Students who have completed less than 80% of course evaluations at the half-year mark will receive a notification email from the Associate Dean of Medical Education. If the compliance rate is less than 80% at the end of the year, students will receive a professionalism warning letter. Any student who has received a warning letter at the end of year one and continues to have less than 80% of course evaluation at the end of the first year, will need to meet with the Associate Dean of Medical Education before the second year begins. Any student who received a warning letter at the end of year one and continues to be non-compliant at the half year point of 2nd year will receive an official letter documenting the reason that this student did not meet the professionalism expectations of the preclerkship curriculum (e.g., did not meet evaluation completion requirements). This letter will also go to the Associate Dean of Student Affairs to be included in the 4th year Dean's letter.

This policy is also available on the school's webpage:

<https://www.bumc.bu.edu/camed/education/medical-education/policies/student-evaluation-of-courses-completion-policy/>

Copyright Policy on the Use of Course Materials

The course's Blackboard site contains educational materials to be used only by students and faculty in conjunction with the course, or by non-course faculty and staff for other approved purposes. None of the posted materials are to be used or distributed without explicit permission from the author of the materials, e.g., lecture notes, PowerPoint presentations, practice LPA or exam questions, case-based exercises, problem sets, etc.

Course materials are protected by copyright and may not be uploaded or copied to other sites for any purpose, regardless of whether the materials are made accessible publicly or on a private account. When content is uploaded to a site, the user is representing and warranting that they have rights to distribute the content, which requires explicit permission from the author of the materials.

Students who distribute materials without permission may be in violation of copyright laws and required to go before the Medical Student Disciplinary Committee.

If you have any questions, contact the Course Director.

For additional information:

- Intellectual Property Protection: <https://www.bu.edu/academics/policies/intellectual-property-policy/>

Chobanian & Avedisian School of Medicine Policies

Policies are located at: <https://www.bumc.bu.edu/camed/education/medical-education/policies/>

Learning Environment Expectations

The Chobanian & Avedisian School of Medicine has a **ZERO** tolerance policy for medical student mistreatment. We expect students to be aware of the policy for appropriate treatment in medicine, including procedures for reporting mistreatment.

Learning more about the school's efforts to maintain and improve the learning environment at: <https://www.bumc.bu.edu/camed/education/medical-education/learning-environment/>

Appropriate Treatment in Medicine (ATM)

Chobanian & Avedisian School of Medicine is committed to providing a work and educational environment that is conducive to teaching and learning, research, the practice of medicine and patient care. This includes a shared commitment among all members of the community to

respect each person's worth and dignity, and to contribute to a positive learning environment where medical students are enabled and encouraged to excel.

Procedures for Reporting Mistreatment

Students who have experienced or witnessed mistreatment are encouraged to report it using one of the following methods:

- Contact the chair of the Appropriate Treatment in Medicine Committee (ATM), Dr. Robert Vinci, MD, directly by email (bob.vinci@bmc.org)
- Submit an online Incident Report Form through the online reporting system <https://www.bumc.bu.edu/camed/student-affairs/atm/report-an-incident-to-atm/>

These reports are sent to the ATM chair directly. Complaints will be kept confidential and addressed quickly.

- Appropriate Treatment in Medicine website: <https://www.bumc.bu.edu/camed/student-affairs/atm/>

Policy on the Appropriate Treatment in Medicine: <https://www.bumc.bu.edu/camed/policy-on-the-appropriate-treatment-in-medicine-atm/>

Learning Environment Oversight (LEO)

The Learning Environment Oversight group was established in June 2022 and serves as a mechanism to monitor all aspects of the learning environment and report back to the school community regularly. The group is comprised of representatives from the Medical Education Office, Student Affairs Office, Appropriate Treatment in Medicine Committee, and students from all curricular years.

Boston University Sexual Misconduct/Title IX Policy

The BU Sexual Misconduct/Title IX Policy is located at: <http://www.bu.edu/safety/sexual-misconduct/title-ix-bu-policies/sexual-misconducttitle-ix-policy/>

Boston University Social Media Guidelines

<http://www.bu.edu/policies/information-security-home/social-media-guidelines/>

Appendix 1. Learning Strategies and Resources

The goal of medical education is to assist medical students to become life-long learners. Physicians need to keep up with ever-evolving best clinical practices and be able to read and retain pertinent facts from medical literature. To maximize your learning in the course, consider the following learning strategies:

Prepare for class to learn the most from each session.

Complete write-ups as soon as possible after you see a patient, no later than 24 hours.

Otherwise, the information gets stale, and details will be forgotten. Write-ups are not term papers; they are official recordings of what was learned on patient interview and exam

Read about the diseases you see in the patients you encounter in your longitudinal preceptorship and clerkship prep sessions. For example,

If you meet a patient with alcoholic liver disease, read about the symptoms, signs, labs, and studies that help you to diagnose it.

If you struggle to diagnose a dyspneic patient who you see in longitudinal preceptorship clinic, review the dyspnea diagnostic framework, and try to commit it to memory.

Practice, practice, practice your PE skills on friends, classmates, and family members.

Practice in the CSSC with task trainers and SimScopes (i.e., stethoscopes that produce auscultation pathology) to solidify your skills.

If you do not feel comfortable answering the KSA questions, then reread the materials assigned. The KSAs assess comprehension of the written and practical material, but they also integrate the material with questions based on clinical vignettes. In addition to helping students prepare for the doctoring exam, KSAs should help students prepare for the doctoring-type USMLE type questions.

OUTSIDE TEXTBOOKS AND ONLINE RESOURCES

Although we will provide **content and resources required for your learning via Blackboard**, there are **some additional outside resources that you may find helpful**.

FOR CLINICAL REASONING (CR)

Comprehensive Clinical Reasoning Book:

- Stern S., Cifu A, and Altkron D. Symptoms to Diagnosis: An Evidence Based Guide. McGraw Hill Lange Medical Books

Diagnostic Frameworks (free)

Penn Frameworks:

<https://www.med.upenn.edu/frameworks/>

Clinical Reasoning Practice (e.g., apps, podcasts, cases)

Human Diagnosis Project (<https://www.humandx.org/>), downloadable app

Short cases that can help you practice your clinical reasoning

Clinical Problem Solvers podcast

Great cases that you can practice your clinical reasoning on; they have diagnostic frameworks available on their old website

\$\$: They have moved behind a Patreon paywall now, so to get access to newer content (2022), you need to buy a subscription (tier 1= \$5/month, but you do not access diagnostic frameworks and exclusive content unless you do tier 2 or 3

Universe of CPC (<https://www.universeofcpc.com/>)

Free website that categorizes all NEJM clinical reasoning cases by problem, diagnosis, etc.

These cases are super hard (I get most of them wrong), but lots of great pearls

FOR CLINICAL SKILLS IN GENERAL (including note-writing, case presentation)

UCSD Practical Guide to Clinical Medicine

(<https://meded.ucsd.edu/clinicalmed/introduction.html>)

FOR PHYSICAL EXAMINATION:

Bickley, Lynn S. (12th edition). Bates' Guide to Physical Examination and History Taking. Philadelphia: J.B. Lippincott Company

The library has purchased access to a complete set of PE videos. Bates' Guide to Physical Examination is an excellent resource and contains targeted interview/ anatomy/ PE/ and write-ups sections as well as the recommended online sources The Bates tapes are accessible from campus at: <http://www.batesvisualguide.com/> and from off campus by Kerberos username/ password at: http://www.medlib.bu.edu/bates_vgtpe/

Physical diagnosis pdx (www.pdxpdx.com)

Amazing website full of murmur and video pathology

Stanford 25 (<https://stanfordmedicine25.stanford.edu/>)

Great videos that teach important physical exam techniques/maneuvers

Additional online resources will be listed with the weekly sessions.