Foundations of Doctoring 1
Course Goals

Goals

1. Know and use the language of physical examination structures, techniques and findings.
2. Relate the physical examination to normal anatomy and physiology.
3. Relate the physical examination to abnormal anatomy and pathophysiology.
4. Perform basic physical examination techniques on adults and children in the following areas:
   - General Assessment (Vital Signs)
   - Extremities and Back
   - Cardiovascular
   - Chest and Lungs
   - Abdomen
   - Head and Neck
   - Skin, Hair and Nails
5. Know and use the language of relationship centered clinical encounters and communication techniques specific to introductions and agenda settings, information gathering, sustaining structure and relationships and closing and forward planning.
6. Identify the key subjective and objective components of the patient data base gathered in the encounter: patient identification, chief complaint, history of present illness, active medical problems, past medical history, medications, allergies, social history, family history, and physical exam findings.
7. Identify the key components of the SOAP note.
8. Practice writing SOAP notes and avoiding common pitfalls in SOAP note writing.
9. Know and use the language of fundamental clinical reasoning concepts, including problem representations, semantic transformation, and key features.
10. Practice clinical reasoning skill through creation of accurate problem representations, identification of key features of the patient's subjective and objective presentation, and creation of a summary statement using semantic qualifiers.
11. Practice a hypothesis-driven approach to history taking and physical examination based on the patients presenting complaints.
12. Practice compassionate treatment of patients, and respect for their privacy and dignity.
13. Uphold and promote the ideals of medical professionalism in all interactions with patients, colleagues, staff and faculty.
14. Recognize and accept limitations in one’s knowledge and clinical skills, and a commitment to continuously improve one’s knowledge and ability.
15. Recognize the importance of cultural, ethnic, racial and religious diversity and its impact on society, health care delivery, and the workplace.
16. Recognize the impact of economics on healthcare delivery
17. Identify the basic legal obligations of clinical practice.
18. Understand and respect the roles of other health care professionals and the need to collaborate with others in caring for individual patients.
Foundations of Doctoring 1
Course Goals

Goals

19. Identify characteristics of effective teamwork.
20. Begin career exploration
Orientation to Foundations of Doctoring

1. State one’s role as a medical professional upon matriculation in medical school and describe one's duties to their school, their colleagues, the faculty and staff and to the patients one encounters.

Vital Signs

1. List the components of patient “general assessment and vital signs.”
2. Demonstrate the proper technique for the use of the stethoscope.
3. Describe the basic components of a blood pressure reading.
4. Demonstrate the ability to obtain a pulse and blood pressure.
5. Describe how to calculate a Body Mass Index (BMI).

Ultrasound - Orientation

1. Recognize the objectives of the US curriculum.
2. Identify the logistics of and expectations for US sessions.

Introduction to Ultrasound

1. Describe fundamental concepts of ultrasound physics and basic ultrasound terminology.
2. Describe important ultrasound artifacts caused by the interactions between sound waves and tissues.
3. Describe physical characteristics and typical imaging applications for commonly used ultrasound transducers.
4. Describe orientation of the transducer to the patient and to on-screen images.
5. Explain the importance of ultrasound transmission gel.
6. Demonstrate basic controls and instrumentation common to all ultrasound machines.
7. Demonstrate the three most common imaging modes: B-mode, M-mode, and Doppler.
8. Recognize the characteristic appearance of different normal tissue types on ultrasound.

Integrated Physical Exam Musculoskeletal System and Spine: Lower

1. Recognize and palpate the surface features of the spine, hip, knee, ankle and foot.
2. Correlate the surface features with the internal anatomical structures.
3. Perform the basic range of motion for each of the aforementioned joints.
4. Identify the directions of movement for each joint (ie. flexion, extension, etc.).
5. Perform the basic diagnostic exam maneuvers of the musculoskeletal system as established by the checklist provided.
Integrated Physical Exam Musculoskeletal: Upper

1. Recognize and palpate the surface features of the shoulder, elbow, wrist and hand.
2. Correlate the surface features with the internal anatomical structures.
3. Perform the basic range of motion for each of the aforementioned joints.
4. Identify the directions of movement of each joint (ie. flexion, extension, etc.).
5. Perform the basic diagnostic exam maneuvers of the musculoskeletal system as established by the checklist provided.

Ultrasound - LOWER EXTREMETY, UPPER EXTREMITY, AND SPINE

1. Identify proper probe selection to image the musculoskeletal system
2. Describe orientation of the transducer to the patient and to on-screen images.
3. Identify and demonstrate normal sonographic anatomy and relationships of the:
   Back, Knee, Ankle, Hand, Wrist, Forearm, Elbow, Shoulder
4. Communicate effectively with other medical students and instructors during the ultrasound scanning session.
5. Interact with other students from other programs during the ultrasound scanning session.

IPE Orientation

1. Describe key features of the role of different health professionals
2. Identify characteristics of professionalism
3. Describe barriers to and strategies for effective collaboration among health care professionals
4. Describe some of the characteristics of effective teams
5. Describe how effective teamwork contributes to health care
6. Collaborate to develop a team contract and identity

Integrated Physical Exam of the Thorax (Pulmonary)

1. Perform the basic components of the pulmonary exam as established by the checklist provided.
2. Recognize the surface and internal anatomical correlates with the pulmonary exam.

SONOGRAPHIC PLEURAL AND CARDIOVASCULAR ANATOMY

1. Identify proper probe selection to image the pleural and cardiovascular system.
2. Identify and demonstrate normal sonographic anatomy and relationships of the:
   Ribs; Intercostal muscles; Neurovascular bundle; Diaphragm and thoracic and abdominal organs; Pleural interface and lung sliding; Orientation of the heart in the chest; Heart and the anatomic relationships of the chambers, aortic root, and aortic, mitral, tricuspid, and pulmonic valves.
3. Communicate effectively with other medical students and instructors during the ultrasound scanning session.
4. Interact with other students from other programs during the ultrasound scanning session.
Integrated Physical Exam of the Thorax-(Cardiovascular)
1. Perform the basic components of the cardiovascular exam as established by the checklist provided.
2. Recognize the surface and internal anatomical correlates with the cardiovascular exam.

Integrated Physical Exam of the Abdomen
1. Perform the basic components of the abdominal exam as established by the checklist provided.
2. Recognize the surface and internal anatomical correlates with the abdominal exam.

Ultrasound - THE ABDOMEN
1. Identify proper probe selection and demonstrate proper image orientation.
2. Demonstrate normal ultrasound anatomy and anatomic relationships of the abdominal organs including the: Liver, Gallbladder, Right and left kidney, Pancreas, Inferior vena cava, Bladder.
3. Communicate effectively with other medical students and instructors during the ultrasound scanning session.
4. Interact with other students from other programs during the ultrasound scanning session.

Medical Professionalism: Your Role as a Student
1. Describe professionalism components.
2. Recognize why professionalism is important from matriculation onwards.
3. Identify guiding ethical principles from the AMA Code of Ethics.

Professionalism Cases in Phase I
1. Identify professionalism components in cases.
2. Recognize why professionalism is important from matriculation onwards through cases.
3. Identify ethical principles and apply to cases.
4. Review SOM Professionalism guidance related to cases.

Integrated Physical Exam of the Head and Neck
1. Perform the basic components of the head and neck exam as established by the checklist.
2. Recognize the surface and internal anatomical correlates with the head and neck exam.

Ultrasound - THE HEAD AND NECK
1. Probe selection.
2. Identify normal bedside ultrasound orientation.
4. Communicate effectively with other medical students and instructors during the ultrasound scanning session.
5. Interact with other students from other programs during the ultrasound scanning session.
Legal Presentation

1. Demonstrate an understanding of HIPAA Privacy Act and how it relates to health information documentation.
2. Discuss basic medico-legal issues as they relate to clinical practice.

Introduction to Calgary Cambridge Approach to Communication

1. Discuss the importance of learning skills for communicating with patients.
2. Discuss why good communication skills need to be practiced with patients.
4. Describe coaching approach and session logistics.

Learning Observational Skills using Art

1. Describe how closely studying works of art can translate to observational skills in a clinical encounter.
2. Articulate the importance of carefully observing the details of a patient presentation.
3. Describe the importance of understanding the context in which patients present.

Learning observational skills using art—small group sessions

1. Communicate to others your specific and accurate observations.
2. Describe how closely studying works of art can translate to observational skills useful for both physical examination and communication in a clinical encounter.
3. On careful observation, articulate appropriate details and relevant narrative elements of a work of art to peers as practice for communicating a patient’s problem representation.
4. Describe the importance of understanding the context, including the reason for seeking care, in which patients present for a clinical encounter.

Preceptorship Orientation

1. Describe the goals of the preceptor experience: gaining exposure to a professional role model, demonstrating a comfort level with interacting with patients, develop self-directed learning skills, application of basic science knowledge, and practicing clinical skills.
2. Recognize that preceptor experiences will vary and require interactive feedback in order to optimize the experience.

Communication Skills for Preceptor Site

1. Describe communication skills for use with patients at preceptor sites.

Electronic Health Record and Documentation

1. Describe why health IT and EHR’s are on the rise.
2. Recognize the various technologies you will be using.
3. Describe what medical students are allowed to document in the EHR.
4. Discuss how to maximize your interaction with EHR’s and your patients.
Preceptor Requirements
1. Describe the goals of the preceptor experience: gaining exposure to a professional role model, demonstrating a comfort level with interacting with patients, develop self-directed learning skills, application of basic science knowledge, and practicing clinical skills.
2. Recognize that preceptor experiences will vary and requires interactive feedback in order to optimize the experience.

Preceptor Panel Session
1. Discuss preceptor experience with Phase II students.
2. Discuss the rationale and method of logging preceptor experiences.

Continuity Clinic 1
1. Shadow your preceptor on clinical encounters.
2. Observe preceptor communication and physical exam methods.
3. Introduce yourself to clinic staff.

Communications Coaching: Initiating the Session and Gathering Information
1. Practice the communication skills of initiating the session and gathering information.
2. Practice the communication skills of building the relationship and providing structure.
3. Practice the skills of goal-setting and self-reflection.
4. Provide constructive feedback to peers.
5. Demonstrate ability to accept constructive feedback and respond in a productive manner.

Continuity Clinic 2 & 3
1. Practice physical exam skills you have learned (vitals, upper and lower extremity, pulmonary, cardiovascular, abdominal, head & neck) with preceptor supervision.
2. Practice communication skills you have learned (initiating the session, gathering information, providing structure, building relationship).

Continuity Clinic 4
1. Practice physical exam skills you have learned (vitals, upper and lower extremity, pulmonary, cardiovascular, abdominal, head & neck) with preceptor supervision
2. Shadow your preceptor on clinical encounters
3. Practice communications skills you have learned (calgary cambridge) with preceptor supervision

Medical Economics
1. Describe the the conditions necessary for a competitive market and consider medical care in this context.
2. Explain the evolution of physician practice and the forces that have shaped our current system.
3. Describe the effect of insurance on medical decision-making.
4. Discuss the effect of financing on the physician patient relationships.
Cross Cultural Communication

1. Utilize self reflection to gain greater insight into how you project yourself.
2. Recognize interaction of medical and personal cultures in a clinical encounter.
3. Identify effective and ineffective communications in a cross-cultural encounter.
4. Practice using Kleinman questions in a clinical encounter.

Clinical Interlude - Orientation and Healthcare Teams

1. Describe what behaviors make a good functioning team and why this is important in medicine.
2. Describe who comprises the inpatient healthcare team and the role and activities provided by inpatient healthcare team members.
3. Describe the role of the trainee (medical student or resident) and the attending physician in providing care to the hospitalized patient.

Clinical Interlude - Hospitals 101

1. Describe the process of patient hospitalization including how decisions are made to admit, transfer, and discharge.
2. Describe role of teaching/learning in hospitals.
3. Describe local Denver hospitals.

Clinical Interlude - Hospital Experience

1. Round, observe and interact with inpatient teams.
2. Interview a patient/family member and/or review a patient’s chart as recommended by your hospital team (history, inpatient experiences.).
3. Interview and spend time with a healthcare professional who is part of the team (nurse, social worker, chaplain, physical therapist, phlebotomist, etc.).
4. Interview physician team members about specialty careers.
5. Discuss learner roles on team (MS3/MS4/residents) - optional.
6. Shadow Interns or MS4s and pre-round with them on Thursday - optional.
7. Observe patient interactions with consultants - optional.
8. Follow patient to tests (i.e. radiology) - optional.
9. Observe specialty-specific activities (i.e. OR team, Care Conferences, Procedures) - optional.

Clinical Interlude - Debriefing

1. Reflect on what surprised you about the inpatient team, or differed from your expectations.
2. Reflect on what you think contributes most to the successful working of an inpatient team.
3. Reflect on what most influences patients and families satisfaction with their hospitalization.
4. Reflect on how this experience impacts your thinking about career choice.
CI - Wrap-Up/Team Scoring and Reflections

1. Reflect upon the career exploration process.
2. Reflect upon hospital environment and culture.
3. Reflect upon team scoring of teamwork behaviors.
4. Reflect upon interprofessional nature of healthcare teams.

Clinical Interlude - Career Exploration

1. Identify career exploration as a developmental process.
2. Utilize Careers in Medicine resources to begin self-assessment and career exploration.

Continuity Clinic 5, 6, 7 & 8

1. Practice physical exam skills you have learned (vitals, upper and lower extremity, pulmonary, cardiovascular, abdominal, head & neck).
2. Practice communication skills you have learned (initiating the session, gathering information, providing structure, building relationship).

Intro to Comprehensive Note, Complete Review of Systems & Core PE

1. Appreciate the purpose and structure of a comprehensive (history and physical) note including elements to include within the subjective, objective, assessment and plan portions of the comprehensive note.
2. Understand the rationale for inclusion of the complete Review of Systems in the subjective portion of the comprehensive note and the use of the Core Physical Examination in the objective portion of the comprehensive note.
3. Understand the communication technique for completing a Complete Review of Systems using both open and close ended questions to rule-in and rule-out possible symptoms.

Core Physical Exam

1. Demonstrate the individual physical exam maneuvers that comprise the Core Physical Exam.
2. Using the provided checklist, review and practice the Core Physical Exam maneuvers with SPETA's.

Dermatology Physical Exam

1. Perform examinations of the skin, hair and nails of patients with dermatology conditions.
2. Accurately describe their exam findings using correct anatomic, dermatologic and pathologic terms.
3. Empathize with patients with dermatologic disorders.
4. Understand that skin disease can have a significant impact on function and quality of life.
5. Appreciate the variety of skin conditions seen in dermatology. For further in depth study of skin disease, consider a 2 or 4 week dermatology elective.
**Continuity Clinic 9**

1. Practice physical exam skills you have learned (vitals, upper and lower extremity, pulmonary, cardiovascular, abdominal, head & neck).
2. Practice communication skills you have learned (initiating the session, gathering information, providing structure, building relationship).

**Musculoskeletal Exam Overview**

1. Be able to ask a patient the key questions to evaluate a musculoskeletal condition.
2. Be able to perform a step-wise complete physical examination to evaluate a musculoskeletal condition.
3. Be able to synthesize the history and physical examination findings to make an accurate diagnosis of a musculoskeletal condition.

**Applied Musculoskeletal Physical Exam**

1. Recognize the clinical presentation of two pathologic musculoskeletal conditions.
2. Recognize the physical exam findings associated with two pathologic musculoskeletal conditions.
3. Demonstrate competence in the basic exam of the knee and shoulder.
4. Use provocative physical examination maneuvers to help differentiate the cause of knee and shoulder pain.

**Continuity Clinic 10 & 11**

1. Continue precepting experiences.
2. Practice your dermatologic exam.
3. Practice your advanced musculoskeletal exam skills.
4. Practice your communication skills.

**Continuity Clinic 12 & 13**

1. Practice your communication skills.
2. Practice your physical exam skills.
3. Look for clinical problems representative of the basic science material you are learning.

**Preparation for Communication Small Groups**

1. Students will describe the Calgary Cambridge Guide (CCG) communication skills of initiating a patient visit and gathering information from a patient.
2. Describe the Calgary Cambridge Guide (CCG) communication skills of building the relationship and providing structure.
Communication Coaching Small Groups

1. Practice the communication skills of initiating the session and gathering information.
2. Practice the communication skills of building the relationship and providing structure.
3. Provide constructive feedback to peers.
4. Demonstrate ability to accept constructive feedback and respond in a productive manner.

The Advanced Cardiac Exam

1. Describe the common etiologies of specific murmurs.
2. Recognize concerning symptoms associated with common murmurs.
3. Describe where to auscultate common murmurs and maneuvers to help elicit/exaggerate murmurs.
4. Recognize that components of the clinical exam (history and physical) are diagnostic tests.

Ultrasound - Cardiovascular

1. Describe the cardiac and vascular physiologic assessments that can be illustrated using ultrasound.
2. Discuss the different modes of ultrasound imaging, including B-mode (brightness), M-mode (motion) color Doppler, and spectral Doppler.
3. Utilize B-mode ultrasound images of the heart and major vessels to demonstrate relative physiologic principles.
4. Utilize M-mode, color Doppler and spectral Doppler imaging modes to demonstrate cardiovascular physiology.
5. Accurately interpret images from cardiovascular ultrasound exams.
6. Communicate effectively with other medical students and instructors during the ultrasound scanning session.
7. Interact with other students from other programs during the ultrasound scanning session.

Comprehensive 'H&P' Note Orientation

1. Perform a comprehensive ‘History & Physical’ note including all elements of a comprehensive history, including a complete review of systems, and documentation of the core physical exam.
2. Create a summary statement in the assessment portion of the comprehensive note including the required elements (age, gender, and chief complaint) of the summary statement.
3. Use semantic qualifiers to highlight key features of the patient’s presentation in representing the patient’s complaint using abstract terms.
Comprehensive ‘H&P’ Note Sessions

1. Appreciate and practice the importance of the summary statement in the assessment portion of the comprehensive note as well as the required elements (age, gender, and chief complaint) of the summary statement and the use of semantic qualifiers to highlight important aspects of the chief complaint.

2. Perform a comprehensive ‘History & Physical’ note including all elements of a comprehensive history, including a complete review of systems, and documentation of the core physical exam.

3. Create a summary statement in the assessment portion of the comprehensive note including the required elements (age, gender, and chief complaint) of the summary statement.

4. Use semantic qualifiers to highlight key features of the patient’s presentation in representing the patient’s complaint using abstract terms.

5. Receive and provide feedback on their comprehensive ‘H&P’ notes and summary statements from colleagues.

Continuity Clinic 14

1. Practice advanced pulmonary exam skills.
2. Practice physical exam skills.
3. Practice communication skills.

The Advanced Pulmonary Exam

1. Demonstrate basic pulmonary exam techniques including palpation, percussion and auscultation.
2. Auscultate abnormal lungs and describe findings.
3. Explain how to use physical exam maneuvers to refine the differential diagnosis.

Continuity Clinic 15

1. Continue precepting experiences.
2. Practice advanced cardiology and pulmonary exam.
3. Practice communication skills.

Digital Review

1. Critically review your standardized patient encounter with a communication coach.
2. Identify your strengths and weaknesses in your communication skills.
3. Be aware of and make plans to practice challenging communication skills in preceptor sites.