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.
Course Goals

Goals

19. Identify characteristics of effective teamwork.

20. Begin career exploration
Foundations of Doctoring 1
Session Learning Objectives

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.

CI - Wrap-Up/Team Scoring and Reflections
1. Reflect upon the career exploration process.
2. Reflect upon team scoring of teamwork behaviors.

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

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.

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--Meeting Healthcare Team Members
1. Describe the members of a health care team and their roles.
2. Discuss the impact of various health care team members on patient care.

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. Practice the skills of goal-setting and self-reflection.
4. Practice the communication skills of closing the visit.
5. Provide constructive feedback to peers.
6. Accept constructive feedback and respond in a productive manner.

Communication Skills for Preceptor Site
1. Describe communication skills for use with patients at preceptor sites.

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.
Comprehensive 'H&P' Note Orientation–REQUIRED

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

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 10 & 11

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.

Continuity Clinic 12 & 13

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

Continuity Clinic 1-3

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).
3. Look for clinical problems representative of the basic science material you are learning.
**Continuity Clinic 4-7**

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).

**Continuity Clinic 8 & 9**

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

**Core Physical Exam**

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

**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.

**Dermatology Physical Exam**

1. Perform examinations of the skin, hair, nails, and mucosal surfaces of patients with skin conditions.
2. Accurately describe exam findings using correct anatomic and dermatologic terminology.
3. Empathize with patients with dermatologic disorders.
4. Recognize that skin disease can have a significant impact on function and quality of life.
5. Improve development of a differential diagnosis in patients with skin disease.

**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.
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.

IHI - From Error to Harm

1. Explain the Swiss cheese model of error.
2. Define active failures and latent error and discuss their roles in causing harm.
3. List the main types of unsafe acts utilizing James Reason’s classification system.
4. Identify at least one example of how health care has reduced harm.

IHI - Human Factors and Safety

1. Explain how human factors principles apply to health care.
2. Describe how changes to processes can mitigate the effects of factors that contribute to error.
3. Define simplification, standardization, constraints, forcing functions, and redundancies.
4. Discuss the risks and benefits of using technology to improve patient safety.

IHI - Introduction to Health Care Improvement

1. Describe common challenges for health care systems around the world.
2. List the six dimensions of health care, and the aims for each, outlined by the Institute of Medicine in 2001.
3. Explain the value of improvement science in health care.

IHI - Introduction to Patient Safety

1. Summarize the scope of medical errors and preventable harm to patients in health care.
2. Describe the impact of medical errors on patients, families, and providers.
3. Explain why blaming and punishing individuals for errors rarely improves patient safety.
4. Identify four ways any provider can improve safety for patients in his or her direct care.

IHI - Introduction to Person- and Family-Centered Care

1. Describe the partnership model of patient-provider relationships.
2. Explain why the partnership model can improve health.
3. Discuss how social conditions, faith, culture, and trust affect the patient-provider relationship.
4. Identify at least four skills to improve clinical interactions with patients.
IHI - Responding to Adverse Events
1. Describe four steps to take in the immediate aftermath of an adverse event.
2. Explain when you should apologize to a patient and how to apologize effectively.
3. Discuss the impact of adverse events on providers.
4. Explain how you can use root cause analysis to address system problems in health care.

IHI - Teamwork and Communication in a Culture of Safety
1. Explain why effective teamwork is essential for promoting patient safety.
2. Define a culture of safety and discuss the features of a strong safety culture.
3. Identify four behaviors anyone can use to promote teamwork, communication, and a culture of safety.
4. Use structured communication techniques to improve communication within health care.

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.

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.

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.

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.
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.

Intro to the Comprehensive (H&P) Note, Complete Review of Systems, & Core Physical Exam

1. Appreciate the purpose and required elements of a comprehensive medical encounter.
2. Appreciate the purpose and structure of a comprehensive (History & Physical) note including elements within the subjective, objective, assessment and plan portions of the note.
3. Describe 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.
4. Recognize the communication techniques for completing a Complete Review of Systems using both open and close ended questions to rule-in and rule-out possible symptoms.

Introduction to Calgary Cambridge Approach to Communication REQUIRED

1. Discuss the rationale for learning medical communication skills.
2. Identify communication skills based on the Calgary-Cambridge framework and its components.
3. Describe the use of small groups and standardized patients for learning communication skills.

Introduction to Ultrasound and Musculoskeletal Lower Extremity and Back

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.
9. Identify proper probe selection to image the musculoskeletal system.
10. Identify and demonstrate normal sonographic anatomy and relationships of Lower MSK and back body parts.
11. Communicate effectively with other medical students and instructors during the ultrasound scanning session.
12. Interact with other students from other programs during the ultrasound scanning session.
IPE Orientation
1. Explain the rationale for interprofessional collaboration to improve health care.
2. Explain the importance of interprofessional education in creating a collaborative workforce.
3. Identify the health professions schools/programs on campus.
4. Identify common and unique characteristics of your IPE team members.
5. Describe components of the Team-Based-Learning (TBL) process.
6. Discover how teams function more effectively than individuals on their own.
7. Recognize the importance of effective communication for team formation and function.

IPED Orientation for Medical Students
1. Discuss the challenges and opportunities for the profession of medicine with interprofessional education and collaborative practice.
2. Explore the value of IPED for medical students.
3. Describe the outcomes of the Interprofessional Education and Development (IPED) course.

Medical Economics
1. Describe the evolution of health insurance in the United States from 1900-2016.
2. Describe the impact that healthcare payment models can have on cost and quality.
3. To discuss the pros and cons of healthcare reform efforts in terms of coverage, cost, quality, and addressing health disparities.

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.

Musculoskeletal Exam Overview--REQUIRED
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.

Needle Safety Presentation
1. Describe how to prevent needlestick injuries in the clinical setting.
2. Describe what to do if you experience a needlestick in the clinical setting.
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.

Preceptor Panel Session

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

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.

Preparation for Communication Small Groups--REQUIRED

1. Review the communication skills of initiating the session and gathering information.
2. Review the communication skills of building the relationship and providing structure.
3. Review the skills of learning goal setting and self reflection.

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. Describe how the SOM Teacher/Learner agreement applies to cases.
5. Analyze a case that raises issues of professional obligations of life-long learning.
6. Analyze cases that raise issues of the appropriate use of social media.
7. Analyze cases that raise issue of privacy and confidentiality and the role of HIPAA.
8. Analyze cases that raise issues of personal wellness and obligations to peers.
9. Identify and practice strategies for effective feedback to students and faculty.

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.
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.

The Henry Claman
1. Describe how closely studying works of art can translate to observational skills in a clinical encounter.
2. Identify narrative and other relative elements in a work of art which could apply to clinical medicine.
3. Interpret appropriate details from narratives in art to peers to articulate patients' reasons for seeking care.
4. Appreciate how the importance of context—including recent events, personal relationships, and the emotional state of individuals—in a work of art can be applied to clinical medicine.
5. Develop the skill of empathy using works of art to improve one's understanding of the context of a clinical encounter and a patient's reasons for seeking care.

The Henry Claman "Art of Observation" Small Groups Session
1. Describe how closely studying works of art can translate to observational skills in a clinical encounter.
2. Identify narrative and other relative elements in a work of art which could apply to clinical medicine.
3. Interpret appropriate details from narratives in art to peers to articulate patients' reasons for seeking care.
4. Appreciate how the importance of context—including recent events, personal relationships, and the emotional state of individuals—in a work of art can be applied to clinical medicine.
5. Develop the skill of empathy using works of art to improve one's understanding of the context of a clinical encounter and a patient's reasons for seeking care.

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.

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

Ultrasound - THE HEAD AND NECK
1. Probe selection.
2. Identify normal bedside ultrasound orientation.
3. Identify and demonstrate normal ultrasound anatomy of the:
   Neck vascular, Neck muscles, Neck nerves, Trachea, Thyroid gland, Eye
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.

Ultrasound - 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.

Ultrasound - 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.

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).