CORE FAMILY MEDICINE (FMED 301) Syllabus

Kansas City University
College of Osteopathic Medicine



COURSE DIRECTORS

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CREDIT HOURS: VARIABLE

COURSE DESCRIPTION

This required clerkship provides students with clinical exposure, observation, and training to further their understanding of family medicine, which has been described as caring for the patient across the lifespan (includes pediatric to geriatric patients). Students will focus on ambulatory management of common acute and chronic medical problems within a primary care setting. This may include common primary care procedures. At some clerkship sites, students may also experience care of the pregnant patient, the hospitalized patient, or the patient who lives in a long-term care facility.



INSTRUMENT(S) OF STUDENT EVALUATION AND ASSESSMENT

- Students will be evaluated through a combination of one or more of the following assessment modalities
 - Clinical Competency Assessment from Preceptor
 - Boards and Beyond Videos
 - o Didactic Articles and Quizzes
 - o End of Clerkship Reflections from the Student
 - o Standardized Case Log
 - o FMED COMAT Exam

This syllabus is to provide the student guidance in what may be covered and expected during the clerkship. Every effort will be made to avoid changing the clerkship requirements but the possibility exists that unforeseen events will make syllabus changes necessary. KCU reserves the right to amend, modify, add, delete, supplement and make changes as the clerkship needs arise.

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Course Content of Family Medicine Clerkship

Health care provided by family physicians has several unique characteristics that are shown in the table below. These characteristics are highly interwoven with one another and include the importance of knowing your patient, provisions of care within a community versus tertiary-care setting, and having the opportunity to provide different types of care within the same visit. Although many types of physicians provide first-contact care, the characteristics listed below are not always present. Understanding how to provide acute and chronic disease care within this context is of benefit to all medical students.

Key Characteristics of Family Physicians
Prior knowledge of the patient – allows a thoughtful staged, tailored approach
Care for a diverse population
Provide care in a community setting
Multipurpose visits – e.g. address health promotion in an acute visit
Staged diagnostic approach
Opportunity for follow-up care

Clerkship Requirements

Didactic Conferences and Reading Assignments

While the focus of the clinical years is hands-on experience, didactic conferences and reading assignments are often provided as an aide to this learning process. Completion of reading assignments and attendance at didactic conferences scheduled by KCU, the Regional Assistant Deans, DMEs, the core site hospital, clerkship service or preceptor are required without exception.

Boards and Beyond Videos

Required Boards and Beyond videos have been added to core clerkship curriculum and must be completed prior to receiving a final grade and credit. The quiz associated with each required video from the playlist is highly encouraged, but not required. While students are encouraged to work through all Boards and Beyond Videos, only the following are required to be completed by the last day of the clerkship.

Core Family Medicine - Boards and Beyond

Case Log

In order to reasonably standardize the family medicine experience for all KCU students across many sites, students will be required to complete a case checklist of common acute and chronic problems, and health maintenance visits. If a student has been unable to see a patient with a particular problem, the student can supplement their experience with content from Boards and Beyond, or receive case-based instruction about that problem or visit type from their preceptor.

Didactic Articles and Quizzes

There will also be an article reviewing evaluation and management of each of these problems, which the student will be required to read. These articles are located in Canvas. There is a short quiz for each article, which the student will be required to complete.

Acute Care

Learning Objectives for Acute Presentations		
At the end of the clerkship, for each common symptom, students should be able to:	AOA Core Competency Appendix #1	AAMC Entrustable Professional Activity Appendix #2
Perform appropriate structural evaluation and osteopathic manipulative treatment under supervision (A & C)	3, 4, 5	3, 4, 11, 12
Differentiate among common etiologies based on the presenting symptom.	2, 3	2
Recognize "don't miss" conditions that may present with a particular symptom	2, 3.	2
Demonstrate performance of a focused history and physical examination.	1, 3, 4	1
Interpret information for a patient's history and physical exam to determine most likely diagnosis.	1, 2, 3	1, 2
Discuss the importance of a cost- effective approach to the diagnostic work-up.	3, 5	3, 4, 9
Describe the initial management of common and dangerous diagnoses that present with a particular symptom.	1, 2, 3	3, 4
Document an acute care, chronic care, or health maintenance visit.	3, 4, 6	5

Chronic Care

The percentage of patients who have chronic disease is large and increasing with the aging of the population. Care for patients with chronic diseases requires substantial health care resources. Family physicians provide a large portion of this care, often coordinating this care among many types of subspecialists. Every student benefits from learning about chronic disease management. General components of the approach to chronic care, appropriate for a third-year medical student, include diagnosis, surveillance, treatment, and shared goal-

setting. Important characteristics of chronic disease management provided by family physicians are shown here:

Key Features of Chronic Disease Management by Family Physicians
Chronic disease management knowledge and skill
Attention to comorbidities
Continuity context
Relationship with the patient
Patient empowerment and self-management support

Many patients have more than one chronic disease. In caring for those patients, continuity increases efficiency and improves patient outcomes. Similar to diagnosis in acute care, continuity allows the family physician to address multiple issues in stages. Students should understand, however, that a follow-up visit with a patient is different than the initial visit with a patient and is also different from an acute problem visit. Students should also learn that a therapeutic physician-patient relationship facilitates negotiation and improves physician and patient satisfaction and outcomes.

Learning Objectives for Core Chronic Presentations		
At the end of the clerkship, for each core chronic disease, students should be able to:	AOA Core Competency Appendix #1	AAMC Entrustable Professional Activity Appendix #2
Find and apply diagnostic criteria.	1, 2, 3	1, 2, 3, 7 3, 4, 7
Find and apply surveillance strategies.	1, 2, 3 2, 3	3, 4, 7
Elicit a focused history that includes information about adherence, self-management and barriers to care.	1, 3, 4, 5	1
Perform a focused physical examination that includes identification of complications.	3	1
Assess improvement or progression of chronic disease.	3	3
Describe major treatment modalities.	2, 3	3, 4
Propose and evidence-based management plan that includes pharmacologic and non-pharmacologic treatments and appropriate surveillance and tertiary prevention	2, 3, 7	3, 4, 7
Communicate appropriately with other health professionals that are involved in the patient's care (e.g. physical therapists, nutritionists, counselors).	4	5, 6, 8, 9
Communicate respectfully with patients who do not fully adhere to their treatment plan.	4	1, 2, 3, 4
Educate a patient about an aspect of his/her disease respectfully, using	4	1, 2, 3, 4

language that the patient understands. When appropriate, ask the patient to explain any new	
understanding gained during the	
discussion.	

The table in Appendix #3 offers details regarding topic-specific objectives, common and serious complications, and related osteopathic skills.

Health Promotion & Preventive Care

Health promotion is an essential component of every person's health care. Family physicians provide health promotion to all patents regardless of life stage or gender. The United States Preventive Services Task Force recommendations are the most appropriate for students to learn in the family medicine clerkship. Creating an individualized health promotion plan requires a preventive medicine knowledge base and skills in negotiation and patient education. Family physicians are skilled in prioritization and must partner with patients to determine which preventive services are appropriate, important, and affordable. Clinical prevention can be included in every office visit. Learning to "juggle," i.e. prioritize or co-manage, acute, chronic, and prevention agendas, is an advanced skill that even practicing family physicians are continually trying to improve.

CORE HEA	LTH PROMOTION/PREVEN	TION TOPICS
Children and Adolescents	Abuse and neglect	Diet/exercise
	Family/social support	Growth and development
	Hearing	Lead exposure
	Nutritional deficiency	Potential for injury
	Sexual activity	Tuberculosis
	Vision	Recommended immunizations
Adults	Breast cancer	Cervical cancer
	Colon cancer	Coronary artery disease
	Depression	Fall risk in elderly patients
	Type 2 diabetes	Obesity
	Osteoporosis	Prostate cancer
	Sexually transmitted infections	Substance use/abuse
	Intimate partner and domestic violence	
	Recommended immunizations	S

Learning Objectives for Health	Promotions ar	nd Preventive Care
At the end of the clerkship, for each core chronic disease, students should be able to:	AOA Core Competency Appendix #1	AAMC Entrustable Professional Activity Appendix #2
Define wellness as a concept that is more than "not being sick."	1, 2, 3	2, 3, 7,
Define primary, secondary, and tertiary prevention.	2, 3	3
Identify risks of specific illnesses and behaviors that affect screening and treatment strategies	3	2, 3
Develop a health promotion plan for a patient of any age or either gender that addresses the core health promotion conditions listed in topic table below.	3	4
Identify and perform recommended ageappropriate screenings.	3	3
Elicit a gynecological and obstetric history for appropriate screening and treatment.	3, 4	1
Conduct a physical examination on a child and recognize normal and abnormal physical findings in various age groups.	3	1
Apply the stages of change model and use motivational interviewing to encourage lifestyle changes to support wellness (weight loss, tobacco cessation, safe sexual practices, physical activity, nutrition, diet).	3, 4	7, 9, 12
Provide counseling related to health promotion and disease prevention.	3	12
Provide pediatric patients and their families with anticipatory guidelines based on developmental stage and health risks.	3	12
Discuss an evidence-based, stepwise approach to counseling for behavior change, including tobacco cessation.	3	12
For each core health promotion condition in the topic table below, discuss who should be screened and methods of screening.	3	12
Find and apply the current guidelines for immunizations, including protocols to "catchup" a patient with incomplete prior immunizations.	2, 3	12
Communicate effectively with children, teens, and families.	4	1, 4, 12

COMAT Exam (End of Clerkship)

Students must pass a National Board of Osteopathic Medical Examiners (NBOME) Comprehensive Osteopathic Medical Achievement Test (COMAT) upon completion of each 3rd year core discipline.

Students are expected to study for these exams with similar rigor as all other high stakes examinations.

Exam Blueprint

Students are awarded a grade of Fail, Pass or Honors for COMAT Exams based on academic year norms established by the NBOME in combination with minimum standards set by KCU. Exam scores and Examinee Performance Profiles (EPP) are made available to students within 10 business days following the Exam date through www.nbome.org. NBOME Percentile Scores provide normative information about the relative rank of test takers' performance in comparison to others who took the Examination.

When a student does not achieve a passing score on a COMAT Exam, a retake is required. The exact date and time of the remediation Exam will be communicated by the Assessment Department and students are expected to retake the Exam as scheduled.

End of Clerkship Reflections

Students are responsible to complete End of Clerkship Reflections through eValue at the end of every clinical experience to include:

- Evaluation of self and the Clerkship
- Evaluation of the Preceptor

Completion of these reflections are required prior to receiving a final grade or credit for any clerkship. Students are encouraged to provide accurate comments regarding the preceptor/clerkship experience. All information submitted in the reflections is anonymous and will be de-identified for anonymity before being released to the site or preceptor the following academic year.

Evaluation & Grading

To be successful in this course the student must achieve the minimum score required in each component listed below. The final grade of Pass/Fail/Honors for the core rotation is derived from the following components:

Component	Evaluation Tool	Minimum Score Required
Standardized Case Log	Case Log via CANVAS	Upon completion of this clerkship, student is responsible for completing the case checklist in CANVAS with preceptor confirmation.
Didactic Articles	Online quizzes via CANVAS	Completion
Boards and Beyond	Videos	Completion of each video
Standardized Assessment	COMAT Exam	Scaled Score of 85 or greater
Clinical Competency	Clinical Clerkship Evaluation	Upon completion of this clerkship
Assessment from Preceptor	via eValue	students should perform the

		behaviors outlined within the "expected" level of each competency rated on the clinical clerkship evaluation and the AACOM Osteopathic Core Competencies for Medical Students. Student evaluations with ratings of below expected for any competency may result in failure.
End of Clerkship Evaluations from the Student	Evaluation of Clerkship Evaluation of Preceptor Evaluation of Self Via eValue	Upon completion of this clerkship student is responsible for completing evaluations of clerkship, preceptor, self via eValue.

All of above items are mandatory for successful course completion. Professionalism and work habits are a significant portion of the clinical assessment. These include the student's demonstration of respectful behavior towards others, respect for patient privacy, accountability, and integrity. Please note that professional behaviors which are below expectations, at the discretion of the clerkship director, may result in failure of rotation for non-professional student conduct. Be punctual, be prepared, and represent KCU well.

Course Structure

Clerkships occur in various settings across the country and provide a wide variety of educational experiences giving students an opportunity to understand how context influences the diagnostic process and management decisions. Physicians routinely address complexities, including patients with multiple concerns, various psychosocial issues, and different, sometimes conflicting behaviors that influence their health and health care. Due to the breadth of care provided by physicians it is not possible to list all potential patient presentations that physicians competently manage. The required elements within the clinical curriculum are progressive and accomplished across the continuum of the required clerkships.

Students will rotate in assigned clinical settings in order to complete the required clerkships. Preceptors will specify site requirements for the clerkship and will see that students are provided with an appropriate level of clinical and didactic experience. To ensure consistency among clerkships, this standardized curriculum is provided. In order to successfully complete the required clerkships, students must fulfill requirements specified by their preceptor and complete the required elements of the standardized curriculum.

The KCU-COM standardized core curriculum has been designed for the purpose of ensuring that students understand expectations and work to achieve competency in the diagnosis and management of common illnesses. In so doing, students will gain an appreciation for appropriate utilization of a variety of treatment modalities.

Required Textbooks

Most available through KCU Library Database with KCU Student ID

<u>Bickley LS, Szilagyi, PG: Bates' Guide to Physical Examination and History Taking, 13th Edition 2016, Lippincott, Williams & Wilkins, Baltimore, Maryland</u>

Chila AG: Foundations of Osteopathic Medicine, 4th edition, 2011, Lippincott, Williams & Wilkins, Baltimore, Maryland

Nelson KE, Glonek T: Somatic Dysfunction in Osteopathic Family Medicine, 2007, Lippincott, Williams & Wilkins, Baltimore, Maryland

Nicholas AS, Evan A. Nicholas EA Atlas of Osteopathic Techniques, 4e, 2012, Lippincott, Williams & Wilkins, Baltimore, Maryland

Smith MA, Schrager S and WinklerPrins V eds. Essentials of Family Medicine, 7e, 2019 Wolters Kluwer

South-Paul JE, Matheny SC, Lewis EL. eds. CURRENT Diagnosis & Treatment: Family Medicine, 5e New York, NY: McGraw-Hill

Recommended Resources

(All available through KCU Library Databases with KCU User ID)

- Procedure videos in Canvas
- BATES' Visual Guide to Physical Examination Videos (good for head-to-toe assessments of adult, child and infant) http://batesvisualguide.com/
- The <u>United States Preventive Services Taskforce</u> is a reference source for evidence-based health promotion/disease prevention plans.
- Centers for Disease Control and Prevention for immunization schedules: https://www.cdc.gov/vaccines/schedules/index.html

Osteopathic Medical Education Core Competencies

The AACOM has identified competencies that all osteopathic students should develop during their training. These help ensure that students are able to demonstrate and/or develop specific skills. These overarching competencies and objectives are specifically addressed in the clinical clerkship syllabi and specific topics we anticipate students will be exposed to in this course are labeled with the corresponding competency. The competencies are:

Competency 1: Osteopathic Philosophy & Osteopathic Manipulative Medicine
Graduates are expected to demonstrate and apply knowledge of accepted standards in
Osteopathic Manipulative Treatment (OMT). The education goal is to train a skilled and
competent osteopathic practitioner who remains dedicated to lifelong learning and to practice
habits consistent with osteopathic principles and practices.

Competency 2: Medical Knowledge

Graduates are expected to demonstrate and apply knowledge of accepted standards of clinical medicine in their respective specialty area, remain current with new developments in medicine, and participate in lifelong learning activities, including research.

Competency 3: Patient Care

Graduates must demonstrate the ability to effectively treat patients, providing medical care that incorporates osteopathic principles and practices, empathy, awareness of behavioral issues, preventive medicine and health promotion.

Competency 4: Interpersonal & Communication Skills

Graduates are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, families and other members of health-care teams.

Competency 5: Professionalism

Graduates are expected to uphold the Osteopathic Oath in the conduct of their professional activities that promote advocacy of patient welfare, adherence to ethical principles, collaboration with health professionals, lifelong learning, and sensitivity to diverse patient populations. Graduates should be cognizant of their own physical and mental health in order to effectively care for patients.

Competency 6: Practice-Based Learning & Improvement

Graduates must demonstrate the ability to critically evaluate their methods of clinical practice, integrate evidence-based medicine into patient care, show an understanding of research methods, and improve patient care practices.

Competency 7: Systems-Based Practice

Graduates are expected to demonstrate an understanding of healthcare delivery systems, provide effective and qualitative patient care with the system, and practice cost-effective medicine.

Competency 8: Health Promotion/Disease Prevention

Graduates are expected to coordinate preventive health care across providers. Collaborate within a patient-centered team and demonstrate preventive health principles by modeling a healthy lifestyle.

Competency 9: Cultural Competencies

Graduates are expected to demonstrate an understanding of the scope of culture and the elements that form and define it. Understand the public health implications of cultural competence in health care. Demonstrate familiarity with basic religious and cultural beliefs that affect patients' understanding of the etiology of their illness and/or the efficacy of their treatment.

Competency 10: Evaluation of Health Sciences Literature

Graduates are expected to utilize current technologies, e.g. websites, online search engines, PDA-based programs, information services, and journals to locate health science literature. Apply critical concepts from statistics, epidemiology, and research design to evaluate health science literature.

Competency 11: Environmental and Occupational Medicine (OEM)

Graduates are expected to understand the policy framework and major pieces of legislation and regulations related to environmental and occupational health (i.e. regulations essential to workers' compensation, accommodation of disabilities, public health, worker safety, and environmental health and safety, etc.).

Competency 12: Public Health Systems

Graduates are expected to apply understanding of the interaction of public health and health care systems in the practice of osteopathic medicine as it affects health promotion and disease

prevention. Recognize differences among public health systems, epidemiological systems, and individual systems in the utilization of resources and in the practice of osteopathic medicine.

Competency 13: Global Health

Graduates are expected to identify and treat individual patients with varying cultural beliefs regarding health, disease, and patient care. Compare and contrast differing non-U.S. health care systems.

Competency 14: Interprofessional Collaboration

Graduates are expected to respect the dignity and privacy of patients while maintaining confidentiality in the delivery of team-based care. Act with honesty and integrity in relationships with patients, families, and other team members. Engage other health professionals (appropriate to the specific care situation) in shared patient centered problem solving for effective team-base care.

Osteopathic Core Competencies for Medical Students, American Association of Colleges of Osteopathic Medicine, in conjunction with all U.S. Osteopathic Medical Schools (2012)

Core Entrustable Professional Activities for Entering Residency

Just as the anticipated topics a student will see are tagged to the correlating Osteopathic Competency, we also will label the EPA associated. Over the past several years, program directors have increasingly expressed concern that some medical students are not prepared for residency. While both allopathic and osteopathic medical schools must show that their students' meet specific competencies to maintain accreditation, this alone was not ensuring that the students were able to assume the increased responsibility inherent with starting residency programs as graduates of medical or osteopathic medical schools. For this reason, in 2013 ten schools were chosen to pilot the initial institution of EPA requirements and in 2016 a report was issued by AACOM that, with the unified pathway for residency match, osteopathic schools should include EPAs in their curriculum.

Core Entrustable Professional Activities for Entering Residency are:

- 1. Gather a history and perform a physical examination
- 2. Prioritize a differential diagnosis following a clinical encounter
- 3. Recommend and interpret common diagnostic and screening tests
- 4. Enter and discuss orders and prescriptions
- 5. Document a clinical encounter in the patient record
- 6. Provide an oral presentation of a clinical encounter
- 7. Form clinical questions and retrieve evidence to advance patient care
- 8. Give or receive a patient handover to transition care responsibly
- 9. Collaborate as a member of a professional team
- Recognize a patient requiring urgent or emergent care and initiate evaluation and management
- 11. Obtain informed consent for tests and/or procedures
- 12. Perform general procedures of a physician
- 13. Identify system failures and contribute to a culture of safety and improvement

<u>Core Entrustable Professional Activities for Entering Residency: Curriculum Developers' Guide, American Association of Medical Colleges</u>

Programmatic and Course Research

As a part of the ongoing mission of Kansas City University to improve teaching excellence, there may be research conducted in this class in regards to student study strategies, student views on learning, and the efficacy of classroom pedagogy. Other activities for which performance will be measured (i.e., assignments and exams) are no different from those that would be completed by students in a class where research was not being conducted. Any pedagogical interventions used in this class as a part of the research study will be consistent with professional standards for responsible teaching practices. Throughout the research process student data will be collected anonymously and securely. Final data values will not contain personal identifiers. Upon request, student data can be withheld from the research study.

Policies & Procedures

Students are expected to present and conduct themselves in a professional manner at all times. Students are required to read, understand, and adhere to all the policies and procedures as outlined in the <u>Clinical Education Guidelines</u>.

Department of Clinical Education Contacts

Contact information for faculty and staff of the Department of Clinical Education can be accessed <u>here</u>.

ADDENDUM Curriculum B

This scenario is provided given a clerkship is shortened due to unforeseen circumstances, will provide part in person clerkship experience and part online experience, and/or student is at a site that is using a 2 week virtual/2 week inperson curriculum.

In the event student is assigned to this scenario, the following are the clerkship requirements:

INSTRUMENT(S) OF STUDENT EVALUATION AND ASSESSMENT

- Students will be evaluated through a combination of one or more of the following assessment modalities
 - o Clinical Competency Assessment from Preceptor
 - o Boards and Beyond Videos
 - o Case Files: Family Medicine
 - o Completion of Case Presentation 1
 - Completion of Case Presentation 2
 - o Completion of PowerPoint Presentation
 - o End of Clerkship Reflections from the Student
 - o FMED COMAT Exam
 - Standardized Case Log
 - o Didactic Articles and Quizzes

Boards and Beyond Videos

Required Boards and Beyond videos have been added to core clerkship curriculum and must be completed prior to receiving a final grade and credit. The quiz associated with each required video from the playlist is highly encouraged, but not required. While students are encouraged to work through all Boards and Beyond Videos, only the following are required to be completed by the last day of the clerkship.

Core Family Medicine - Boards and Beyond

Completion of Case Presentation 1

The student shall develop **one [1] case** considering a given scenario. The student will record themselves doing the presentation and submit in Canvas for faculty review. Accepted file types include .mov, .mp4 and .wmv. Other file types may not be accepted if they cannot be opened by the grader.

A **complete** history and physical exam will be prepared in the Power Point presentation (as it would be documented in the patient's medical record, including the osteopathic structural exam). The students should record themselves presenting the case as they would present the case to their attending physician.

Presentation must include the history and physical, the clinical, laboratory, and diagnostic findings, an assessment with differential diagnosis, and a plan for workup and treatment.

Discharge and/or follow-up planning will be presented as well as preventive and long-term goals. Please utilize the template in Canvas to guide your presentation.

The student will select one of the following cases:

Student Last Name Begins with A-I:

- 1. Abdominal pain: DX-Viral Gastroenteritis, DD-Food Poisoning vs Bacterial
- 2. Candida Dermatitis: Pt is New Onset DM

Student Last Name Begins with J-P:

- 1. Pharyngitis + Chest/Abdominal Pain: DD- Strep Pharyngitis-R/O Rheumatic Fever, Post Streptococcal Glomerulonephritis
- 2. COPD vs Pulmonary Fibrosis

Student Last Name Begins with Q-Z:

- 1. Chest Pain: Cardiac vs GI vs Musculoskeletal
- 2. Peripheral Neuropathy: Vitamin Deficiency DD-Neurologic / DM /

Completion of Case Presentation 2

The student shall develop **one [1] case** considering a given scenario. The student will record themselves doing the presentation and submit in Canvas for faculty review. Accepted file types include .mov, .mp4 and .wmv. Other file types may not be accepted if they cannot be opened by the grader.

A **complete** history and physical exam will be prepared in the Power Point presentation (as it would be documented in the patient's medical record, including the osteopathic structural exam). The students should record themselves presenting the case as they would present the case to their attending physician.

Presentation must include the history and physical, the clinical, laboratory, and diagnostic findings, an assessment with differential diagnosis, and a plan for workup and treatment. Discharge and/or follow-up planning will be presented as well as preventive and long-term goals. Please utilize the template in Canvas to guide your presentation.

The student will select one of the following cases:

Student Last Name Begins with Q-Z:

- 3. Abdominal pain: DX-Viral Gastroenteritis, DD-Food Poisoning vs Bacterial
- 4. Candida Dermatitis: Pt is New Onset DM

Student Last Name Begins with A-I:

- 3. Pharyngitis + Chest/Abdominal Pain: DD- Strep Pharyngitis-R/O Rheumatic Fever, Post Streptococcal Glomerulonephritis
- 4. COPD vs Pulmonary Fibrosis

Student Last Name Begins with J-P:

- 3. Chest Pain: Cardiac vs GI vs Musculoskeletal
- 4. Peripheral Neuropathy: Vitamin Deficiency DD-Neurologic / DM /

Completion of PowerPoint Presentation

The student shall develop **one** [1] **PowerPoint** presentation on one of the following Family Medicine topics:

- 1. Interpreting Spirometry
- 2. Delivering bad news
- 3. Interpreting EKG
- 4. Discussing end-of-life planning
- 5. Family planning counseling
- 6. Developmental milestones
- 7. How to choose depression/anxiety medication
- 8. How to choose diabetic medications

Presentation must be a minimum of 10 slides and submitted in Canvas. Please utilize the template in Canvas to guide your presentation.

Case Log

In order to reasonably standardize the family medicine experience for all KCU students across many sites, **students will be required to complete a case checklist of common acute and chronic problems, and health maintenance visits.** If a student has been unable to see a patient with a particular problem, the student can supplement their experience with content from Boards and Beyond, or receive case-based instruction about that problem or visit type from their preceptor.

Didactic Articles and Quizzes

There will also be an article reviewing evaluation and management of each of these problems, which the student will be required to read. These articles are located in Canvas. There is a short quiz for each article, which the student will be required to complete.

COMAT Exam (End of Clerkship)

Students must pass a National Board of Osteopathic Medical Examiners (NBOME) Comprehensive Osteopathic Medical Achievement Test (COMAT) upon completion of each 3rd year core discipline.

Students are expected to study for these exams with similar rigor as all other high stakes examinations.

Exam Blueprint

Students are awarded a grade of Fail, Pass or Honors for COMAT Exams based on academic year norms established by the NBOME in combination with minimum standards set by KCU. Exam scores and Examinee Performance Profiles (EPP) are made available to students within 10 business days following the Exam date through www.nbome.org. NBOME Percentile Scores provide normative information about the relative rank of test takers' performance in comparison to others who took the Examination.

When a student does not achieve a passing score on a COMAT Exam, a retake is required. The exact date and time of the remediation Exam will be communicated by the Assessment Department and students are expected to retake the Exam as scheduled.

End of Clerkship Reflections

Students are responsible to complete End of Clerkship Reflections through eValue at the end of every clinical experience to include:

- Evaluation of self and the Clerkship
- Evaluation of the Preceptor

Completion of these reflections are required prior to receiving a final grade or credit for any clerkship. Students are encouraged to provide accurate comments regarding the preceptor/clerkship experience. All information submitted in the reflections is anonymous and will be de-identified for anonymity before being released to the site or preceptor the following academic year.

Evaluation & Grading

To be successful in this course the student must achieve the minimum score required in each component listed below. The final grade of Pass/Fail/Honors for the core rotation is derived from the following components:

Component	Evaluation Tool	Minimum Score Required
Standardized Case Log	Case Log via CANVAS	Upon completion of this clerkship, student is responsible for completing the case checklist in CANVAS with preceptor confirmation.
Didactic Articles	Online quizzes via CANVAS	Completion
Boards and Beyond	Videos	Completion of each video
Case Presentation 1	Canvas (see template)	Completion of presentation
Case Presentation 2	Canvas (see template)	Completion of presentation
PowerPoint Presentation	Canvas (see template)	Completion of presentation
Clinical Competency Assessment from Preceptor	Clinical Clerkship Evaluation via eValue	Upon completion of this clerkship students should perform the behaviors outlined within the "expected" level of each competency rated on the clinical clerkship evaluation. Student evaluations with ratings below expected for any competency may result in failure.
End of Clerkship Evaluations from the Student	Evaluation of Clerkship Evaluation of Preceptor Evaluation of Self Via eValue	Upon completion of this clerkship student is responsible for completing evaluations of clerkship, preceptor, self via eValue.
Standardized Assessment	COMAT Exam	Scaled Score of 85 or greater

All of above items are mandatory for successful course completion. Clinical Performance is assessed by each attending with whom the student has contact. Professionalism and work habits are a significant portion of the clinical assessment. These include the student attitude, demeanor, and interaction with attendings, peers, and staff. Character qualities and behaviors such as punctuality, teachability, honesty, bedside manner, and integrity are important for your professional development.

Please note, at the discretion of the clerkship director, may result in failure of rotation for non-professional student conduct, i.e. issues with attitude, absenteeism, participation.

Appendix #3: Topic-specific objectives, common and serious complications, and related osteopathic skills

Topic	Topic-Specific Objectives	Common Complications	Emergent/ Serious Complications	Osteopathic Clinical Skills
Abdominal Pain	Recognize the need for emergent versus urgent versus non-urgent management for varying etiologies of abdominal pain. Obtain appropriate history and physical including acute vs. chronic duration and associated symptoms.	Gastro-esophageal reflux disease (GERD), gastritis, gastroenteritis, irritable bowel syndrome, dyspepsia	Appendicitis, diverticulitis, cholecystitis, inflammatory bowel disease, ectopic pregnancy, and peptic ulcer disease	Differentiate the signs and symptoms of a surgical versus non-surgical abdomen. Utilize appropriate OMT modalities to address non- urgent etiologies of abdominal pain
Abnormal Vaginal Bleeding	Elicit an appropriate menstrual history Recognize when vaginal bleeding is abnormal	Pregnancy, cervical polyp, endometrial hyperplasia, medication related	Ectopic pregnancy, endometrial cancer, hormone producing tumors	
Chest Pain	Describe how age and comorbidities affect the relative frequency of common etiologies Apply clinical decision rules that use pretest probability to guide evaluation Recognize indications for emergent versus urgent versus urgent versus non-urgent management for varying etiologies of chest pain Recognize cardiac ischemia and injury on electrocardiogram	Gastrointestinal (e.g., GERD), musculoskeletal (e.g., costochondritis), cardiac (e.g., angina and myocardial infarction), and pulmonary (e.g., pulmonary embolism, pneumothorax)	Myocardial infarction, aortic dissection, pulmonary embolism, pneumothorax	

Acute Care

Topic	Topic-Specific Objectives	Common Complications	Emergent/ Serious Complications	Osteopathic Clinical Skills
Common Skin Lesions	Describe a skin lesion using appropriate medical terminology	Actinic keratosis, seborrheic keratosis, keratoacanthoma, melanoma, squamous cell carcinoma, basal	Melanoma	
Common Skin Rashes	Describe the characteristics of the rash Prepare a skin scraping and identify fungal elements	Atopic dermatitis, contact dermatitis, scabies, seborrheic dermatitis, and urticarial		
Cough	Understand how pretest probability and the likelihood of test results altering treatment can be used to guide diagnostic testing Recognize pneumonia on a chest X-ray Conduct an appropriate pulmonary examination including auscultation,	Infections: pneumonia, bronchitis, or other upper respiratory syndromes, and sinusitis Non-infectious causes: asthma, GERD, and allergic rhinitis	Lung cancer, pneumonia and tuberculosis	Consider MFR to anterior cervical fascia, ME or HVLA to cervicals or thoracics, open thoracic inlet, dome diaphragm, treat ribs
Dementia (acute symptoms)	Describe the difference between acute delirium and dementia Perform a screening test for cognitive decline (e.g. the clock drawing test or the Mini-Mental Status Examination) Select appropriate initial diagnostic tests for a	Infection (UTI, respiratory, etc.), electrolyte disturbance, urinary retention, pain, substance use/abuse, medication effect, depression	Acute cerebrovascular accident	

Depression (initial presentation)	patient presenting with memory loss, focusing on tests that identify treatable causes Appreciate the many presentations of depression in primary care (e.g. fatigue, pain, vague symptoms, sleep disturbance, and overt depression) Use a validated screening tool for depression Assess suicide risk Recognize when diagnostic testing is indicated to exclude medical conditions that may mimic depression Recognize the role of substance use/abuse in depression and the value of identifying and addressing substance use in depressed patients Recognize the potential effect of depression on	Depression in elderly patients, depression associated with serious medical illness (e.g. MI, cancer, CHF, DM etc.), drug use, thyroid dysfunction, major depressive disorder	Intimate partner violence, child abuse/neglect, hypothyroidism, drug use, bipolar disease, suicide risk assessment	Release OA, rib raising, MFR to cervical/, thoradic/, lumbar, cranial (vault hold, CV4)
	effect of depression on self- care and ability to manage complex comorbidities			
Dizziness	Distinguish between vertigo, disequilibrium, pre- syncope, and lightheadedness Identify cardiogenic causes of dizziness on EKG	Benign positional vertigo (BPV), labyrinthitis, medications, arrhythmia, psychiatric, autonomic dysfunction, and orthostatic dizziness	Cerebral vascular disease (CVA), brain tumor, Ménière's Disease, and cardiogenic causes (e.g. arrhythmia)	Consider cranial (address temporal bone, periauricular drainage technique)

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Dysuria	Interpet a urinalysis Discuss when to consider ordering further testing	Urethritis, bacterial cystitis, pyelonephritis, prostatitis, STI, and vulvovaginal candidiasis		Sacral base inhibition, OA release, assess and treat innominates and psoas
Fever	Describe a focused, cost- effective approach to evaluation and diagnostic testing Propose prompt follow-up to detect treatable causes of infection that appear after the initial visit	Viral upper respiratory syndromes, viral GI syndromes, streptococcal pharyngitis, influenza, and otitis media, medications	Meningitis, sepsis, fever without localizing signs, fever in special populations (immunosuppress ed, infants age < 3 mo., returned traveler, unimmunized or underimmunized patient)	
Headache	Form a differential diagnosis based on patient history and physical exam Determine when imaging is appropriate	Tension, migraine and sinus headaches	Meningitis, subarachnoid hemorrhage, and temporal arteritis	OMT if indicated: Cranial technique, cervical and thoracic BLT, Stills, FPR, MFR, ME, HLVA
Joint Pain and Injury	Describe the difference between acute and overuse injuries Elicit an accurate mechanism of injury Perform an appropriate musculoskeletal examination Apply the Ottawa decision rules to determine when it is appropriate to order ankle radiographs Apply the Ottawa decision rules to determine when it is appropriate to order knee radiographs Detect a fracture on standard radiographs and accurately describe displacement, orientation,	Ankle sprains and fractures, knee ligament and meniscal injuries, shoulder dislocations and rotator cuff injuries, hip pain, Carpal Tunnel Syndrome, osteoarthritis, and overuse syndromes (e.g., Achilles' tendinitis, patella-femoral pain syndrome, subacromial bursitis/rotator cuff tendinosis)	Septic arthritis, acute compartment syndrome, acute vascular compromise associated with a fracture or a dislocation	Consider S-CS techhnique for sprains, ME to increase ROM, lymphatics, MFR. HVLA to areas above or below affect3ed joints.

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	and location (e.g., nondisplaced spiral fracture of the distal fibula) Perform a large joint aspiration or injection			
Leg Swelling	Recognize the need for urgent versus non-urgent management for varying etiologies of leg swelling, including when a Doppler ultrasound test for DVT is indicated	Venus stasis and medication-related edema, low albumin states	Deep venous thrombosis (DVT), obstructive sleep apnea, CHF	Note OMT contraindicated in DVT For edema, consider lymphatic technique and addressing diaphragms
Low Back Pain	Describe indications for plain radiographs in patients with back pain Conduct an appropriate musculoskeletal examination that includes inspection, palpitation, range of motion, and focused neurologic assessment	Muscle strain, altered mechanics including obesity, and nerve root compression	Aneurysm rupture, acute fracture infection, spinal cord compromise, and metastatic disease	Consider S- CS, MFR, ME, HVLA to L-spine, treat psoas contracture, piriformis stretch
Male genitourinary symptoms	Select appropriate laboratory tests for a male patient with urinary complaints	Inguinal hernia, cystitis/prostatitis, benign prostatic hypertrophy, erectile dysfunction, hydrocele, varicocele	Testicular torsion, prostate or testicular cancer	
Pregnancy (initial presentation)	Recognize that many family physicians incorporate prenatal care and deliveries into their practices and studies support this practice Recognize common presentations of pregnancy, including positive home pregnancy test, missed/late period, and abnormal vaginal bleeding Appreciate the wide range of responses that women and their families exhibit upon discovering a pregnancy			Sacral inhibition, OA release, assess and treat sacral lesions, psoas and piriformis contractures

Shortness of	Assess a patient with	Asthma, chronic	Exacerbations of	For asthma or
Shortness of Breath/ Wheezing	Assess a patient with dyspnea for signs of clinical instability Describe the role of laboratory testing and imaging in diagnosis of CHF and pulmonary embolism Locate and apply evidence-based guidelines for pharmacologic management of asthma Teach patients appropriate technique and use of maintenance medications and rescue inhalers Develop and asthma action plan for patients Recognize typical radiographic findings of COPD, CHF, and pneumothorax Interpret pulmonary function testing to distinguish between asthma, COPD, and restrictive lung disease	Asthma, chronic obstructive pulmonary disease (COPD), obesity, angina, and congestive heart failure (CHF), bronchiolitis	Exacerbations of asthma or COPD, pulmonary embolus, pulmonary edema, pneumothorax, and acute coronary syndrome	For asthma or COPD: Open inlet, rib raising, pec traction for lymphatic treatment
Upper Respiratory Symptoms	Recognize that most acute upper respiratory symptoms are caused by viruses and are not treated with antibiotics Determine a patient's pretest probability for streptococcal pharyngitis and make appropriate treatment decision (e.g., empiric treatment, test, or neither treat nor test)	Infections: viral upper respiratory infection, bacterial sinusitis, streptococcal pharyngitis, otitis media, mononucleosis Non-infectious causes: allergic rhinitis		Open inlet, sinus milking, periauricular drainage technique, galbreath technique, vault hold, CV4
Vaginal Discharge	Discuss the interpretation of wet prep and potassium hydroxide (KOH)	Bacterial vaginosis, candida vulvovaginitis, sexually transmitted infections		

Chronic Care

Торіс	Topic-Specific Objectives	Common Complications	Emergent/ Serious Complications	Osteopathic Clinical Skills
Multiple Chronic Illnesses (e.g. Depression, Hypertension, Hypothyroidism, Type 2 diabetes, Mellitus)	Assess status of multiple diseases in a single visit List important criteria to consider when prioritizing next steps for management of patients with multiple uncontrolled chronic diseases Document an encounter with a patient who has multiple chronic diseases using a SOAP note and/or chronic disease flow sheet or template	One or more conditions not well-controlled Symptoms related to illness or medication side effect Nonadherence to diet, medications, exercise or other disease-controlling behavior	Thoughts of harm to self or others, hypertensive urgency, diabetic ketoacidosis, thyroid storm, myxedema, hypoglycemia with electrolyte or acid/base disturbance	Recognize interdependence of body systems, gather patient history, perform relevant physical examination
Anxiety	Describe how an anxiety disorder can compromise the ability for self-care, function in society, and coping effectively with other health problems	Interruption of sleep, effect on relationships, palpitations, panic attacks		Address OA, cervicals and ribs with FPR, MFR, consider cranial technique especially CV4

Asthma/ Chronic Obstructive Pulmonary Disease (COPD)	Discuss the difference between asthma and COPD, including pathophysiology, clinical findings, and treatments	Exacerbation	Respiratory failure	OA release, Seated ME or MFR for cervical/ thoracic SDs, rib raising, dome the diaphragm
	Elicit environmental factors contributing to the disease process			
	Recognize an obstructive pattern on pulmonary function tests			
	Recognize hyperinflation on a chest radiograph.			
	Discuss smoking cessation			
Chronic Artery Disease	Identify risk factors for coronary artery disease Use an evidence-based tool to calculate a patient's coronary artery disease risk Counsel patients on strategies to reduce their cardiovascular risks	Angina, claudication	Myocardial infarction, stroke, renal failure, ischemia of extremities	
Chronic Back Pain	Obtain a medication use history Anticipate the risk of narcotic-related adverse outcomes Guide a patient in setting goals for pain control and function	Exacerbation limiting ADLs Lost work days Affection relationships.	Unintentional opioid overdose	Evaluation and OMT using any modality tolerated by patient

Depression (previously diagnosed) Heart Failure	Assess suicide risk Describe the impact of depression on a patient's ability for self-care, function in society, and management of other health problems List underlying causes of HF Recognize the signs/symptoms of HF Recognize signs of HF on a chest radiograph	Limitation of ADLs Impact on relationships Lost days at work Cough, edema, dyspnea, tachycardia	Suicide Malnutrition, confusion	OA release and rib raising, address SDs of cervical, thoracic and lumbar spine, consider cranial Lymphatic techniques (pedal pump, rib raising), address thoracic SDs with modality tolerated by patient
Hyperlipidemia	Determine a patient's cholesterol goals based on current guidelines and the individual's risk factors Interpret lipid laboratory measurements	Coronary artery disease, peripheral vascular disease		
Hypertension	Take an accurate manual blood pressure Recognize the signs/symptoms of end-organ disease	Headache, fatigue, anxiety, LVH	Intracranial hemorrhage, thromboembolic stroke, hypertensive emergency, retinopathy	Head: OA release and/or v-spread, rib raising, address thoracic SDs with any modality tolerable to patient
Obesity	Obtain a dietary history Collaborate with a patient to set a specific and appropriate weight loss goal	Arthritis, DM2, hypertension, hyperlipidemia, OSA, GERD, skin infections		Panorit

Osteoporosis/Osteopenia	Recommend prevention measures	Fractures		Gentle techniques only, HVLA CONTRA- INDICATED
Substance Use, Dependence and Abuse	Obtain an accurate substance use history in a manner that enhances the student-patient relationship Differentiate among substance use, misuse, abuse, and dependence Discuss the typical presentations for withdrawal from tobacco, alcohol, prescription pain medications, and common street drugs Assess a person's stage of change in substance use/abuse cessation Communicate respectfully with all patients about their substance abuse	Effect on relationships, missed days at work, health effects of substance consumed (e.g. cirrhosis, lung cancer), accidents sustained while impaired	Myocardial infarction, respiratory failure, psychosis	
Type 2 diabetes mellitus	Perform a diabetic foot examination Document an encounter using a diabetes mellitus flow sheet or template	Peripheral neuropathy, kidney disease, slow wound healing,	Myocardial infarction, retinopathy, stroke, Peripheral vascular disease requiring amputation,	
Note: The majority of the	Recognize the signs/symptoms associated with hypoglycemia or hyperglycemia		kidney failure	

Note: The majority of the above content was adapted from the 2018 National Clerkship Curriculum, designed by the Society of Teachers of Family Medicine (STFM) to offer medical students across the country an ideal experience in Family Medicine. It has been modified to fit the KCU students' specific information needs and is used with complete permission by the developers.