

# Osteopathic Principles and Practice – OPP 320 Syllabus

Kansas City University  
College of Osteopathic Medicine



## COURSE DIRECTOR(S):

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## CREDIT HOURS: 1.0

## COURSE DESCRIPTION

Osteopathic Principles and Practice (OPP) is a three (3) semester online course that runs during the third and fourth years of osteopathic medical school. OPP as defined by the American Association of Colleges of Osteopathic Medicine's Educational Council on Osteopathic Principles is a concept of health care supported by expanding scientific knowledge that embraces the concept of the unity of the living organism's structure (anatomy) and function (physiology). Osteopathic philosophy emphasizes the following principles: (1) The human being is a dynamic unit of function; (2) The body possesses self-regulatory mechanisms that are self-healing in nature; (3) Structure and function are interrelated at all levels; and (4) Rational treatment is based on these principles (Glossary of Osteopathic Terminology, 2011).

Course Goals	Core Competency	EPA
The OPP course focuses on the integration of OPP, including osteopathic manipulative treatment (OMT), into clinical problem solving and patient care. The clinical conditions covered each semester will be based on the top diagnoses coded nationally for each covered organ-system or specialty. Special emphasis will be placed on the top outpatient clinical diagnoses coded by osteopathic physicians as documented by the National Ambulatory Center Database and those diagnoses that respond well to adjunctive OMT.	I-XIV	1-13

## INSTRUMENT(S) OF STUDENT EVALUATION AND ASSESSMENT

- *Students will be evaluated through a combination of one or more of the following assessment modalities*
  - *OPP Modules*
  - *Online Assessments*
  - *OMM Practice Logs*
  - *OMM Didactics & Quizzes*

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## COURSE GOAL

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## COURSE OBJECTIVES

Comprehensive course objective include the following:

1. Develop an appreciation of the osteopathic approach to patient care and increase confidence and competence in application of osteopathic skills.
2. Demonstrate the ability to write and converse regarding the osteopathic approach to health and disease.
3. Identify, describe, and define the distinctiveness of the osteopathic profession in the health care field.
4. Identify, define, describe, and demonstrate accurate expression of physical findings using professional osteopathic terminology.
5. Identify, describe, and define the physical signs of somatic dysfunction using the tenderness, asymmetry, restricted range of motion, tissue texture abnormalities (TART) format.
6. Demonstrate ability to discern physical signs of somatic dysfunction using the TART format.
7. Demonstrate accurate identification and assessment for somatic dysfunction in the head, cervical, thoracic, rib, lumbar, pelvis, sacrum, abdomen, upper extremity and lower extremity body regions.
8. Identify, describe, and define the major osteopathic manipulative techniques, including soft tissue, muscle energy, high velocity, low amplitude (HVLA), low velocity, moderate amplitude (LVMA), balanced ligamentous tension, counterstrain, myofascial release, facilitated positional release, ligamentous articular strain, cranial OMT, Still, and visceral techniques.
9. Identify, describe, and define the indications and contraindications for specific osteopathic manipulative treatment techniques.
10. Demonstrate the ability to position the patient in a manner that is safe, comfortable, and maintains dignity while diagnosing somatic dysfunction.
11. Demonstrate efficient physician ergonomics while diagnosing somatic dysfunction.
12. Demonstrate the ability to position the patient in a manner that is safe, comfortable, and maintains dignity during the performance of osteopathic manipulative treatment.
13. Identify, define and describe the vascular and lymphatic relationship in systemic disease.
14. Describe the lymphatic drainage routes from each region of the body and describe lymphatic treatment approach for each body region.
15. Identify, define, and describe the spinal segmental level of the sympathetic innervation of the visceral organs.
16. Identify, define, and describe the brainstem and spinal segmental level of the parasympathetic innervation of the visceral organs.
17. Identify, define, and describe the neurologically mediated influences between the autonomic nervous system and the musculoskeletal system including somatovisceral, viscerosomatic, somatosomatic, and viscerovisceral reflexes.
18. Map the anterior Chapman's points and state their visceral associations.
19. Discuss the evidence base for manual medicine for various clinical conditions and clinical settings.

20. Use medical informatics to access the evidence base for manual medicine.

#### Module Objectives - For each covered condition

1. State how the condition is defined and its diagnostic criteria (where applicable).
2. Describe the epidemiology of the condition and how the condition may vary in different age groups.
3. Describe the pathophysiology including the etiology and risk factors of the condition.
4. Describe the clinical manifestations of the condition.
5. Describe the physical examination findings of the condition with particular emphasis on the musculoskeletal manifestations of the condition.
6. Describe the types of diagnostic studies used to assess the condition and state risks, benefits and indications of each study.
7. List the differential diagnoses for each condition.
8. Describe the pharmacological, surgical, and lifestyle and other conservative interventions used in the management of the condition and discuss the risks and benefits of each. Describe how each type of intervention relates to one or more of the five osteopathic treatment models – biomechanical, respiratory –circulatory, metabolic, neurologic, and behavioral.
9. Describe the osteopathic manipulative treatment approach to management of the condition and discuss the treatment goals of the various types of techniques with specific emphasis on the five osteopathic treatment models.
10. Describe the specific steps to treating somatic dysfunction related to the condition with major osteopathic manipulative techniques, including soft tissue, muscle energy, HVLA, LVMA, balanced ligamentous tension, counterstrain, myofascial release, facilitated positional release, ligamentous articular strain, cranial OMT, Still, and visceral techniques.
11. Describe the prognosis of the condition and the factors that affect the prognosis.
12. Describe preventative measure to prevent occurrence and recurrence of the condition.
13. For the assigned manual medicine research reading assignment, state the inclusion and exclusion criteria, methodology including types of manual techniques, results, and relevance to clinical practice.

## **COURSE CONTENT OUTLINE**

The OPP course includes an OMM review and independent systems-based or specialty-based modules that will review anatomy, physiology, diagnosis, and treatment options including osteopathic manipulative medicine (OMM) for each covered diagnosis. Individual modules may be completed in any order but are recommended to be completed during clinical rotations that include a high volume of clinical cases covered in the module.

### **OMM Review**

Reviews of OMM, as taught in the first and second year Osteopathic Theory and Methods curriculum, will be available each semester. Individual reviews will focus on diagnosis and treatment of somatic dysfunction of each body region. Diagnosis reviews will be body region specific: cranium, cervical, thoracic, ribs, lumbar, pelvis, sacrum, abdomen, upper extremity, and lower extremity. OMT reviews will be technique specific. Material presented in each of these OMM reviews is comprehensive throughout the three semester OPP curriculum.

### **OPP Modules**

Each semester will include independent systems-based or specialty-based modules that will review anatomy, pathophysiology, diagnosis, and treatment options including OMM for each covered diagnosis. Each module will include: Units on integrated diagnosis and treatment for specific clinical conditions or for specialized patient populations; research articles for review;

and an online multiple choice assessment. Special emphasis will be placed on the top outpatient clinical diagnoses coded by osteopathic physicians as documented by the National Ambulatory Center Database and those diagnoses that respond well to adjunctive OMM. Self-study topics or reading assignments may be included within the units and should be completed prior to taking module assessment.

The first semester of the course (OPP 320) includes an *Introduction to the OPP Course* Module which includes a pass/fail quiz that must be completed before the other modules and assessments are available.

### **Online Assessments**

Each module will include an electronically delivered, timed, written assessment of approximately 20 case-based multiple choice or matching items focusing on the material covered in the module and related OMM diagnosis and treatment review material. Objectives will be provided for each module to guide the learner in preparation for the assessment. Online written assessments for each semester may be completed in any order. Deadlines will be posted for the required completion of the assessments. Assessments are due every **10<sup>th</sup> of the month** and will lock after the deadline. Assessments will not be reopened unless due to an approved absence. Students who miss a deadline will result in the loss of all points for that assessment.

**All assessments must be submitted to attain a passing grade in the course. Missed assessments will reopen at the end of the course for zero points to meet this requirement.**

Students are held to the honor code while taking the assessments and may not discuss the content of the assessments with their student colleagues. See KCU Honor Code of Academic Conduct available [here](#).

Failure to abide by the code of conduct may result in disciplinary actions as outlined KCU Student Handbook available [here](#).

### **OMM Practice Logs**

To encourage practice of OMT in a variety of clinical settings and for variety of conditions, osteopathic students will be required to perform **ten [10]** total supervised OMM treatments per semester on patients or volunteers and keep a log of those treatments. Record the chief complaint(s), the treatment date, patient age, and sex along with each practice treatment record the body regions and types of OMT used. A single patient with multiple chief complaints may only be counted as one patient (or volunteer) on any given day. Identify the physician who supervised each individual OMM treatment by printing their name in the designated column next to the treatment information. Each physician (DO or MD) who supervised one or more OMM treatment(s) will need to sign once each semester at the bottom of the practice log form to verify their supervision.

Practice Logs will be turned in once per semester by online submission to Canvas by the designated date and time. **Students who miss the deadline will result in the loss of all points for the logs.** Log forms may be completed electronically using a program such as Notability and uploaded by the specified due date. Accepted uploaded files types include .jpg, .doc, and .pdf. Other file types may not be accepted if they cannot be opened by the grader. .

**Practice logs submitted late will result in loss of total practice log points unless due to an approved absence. Logs must be submitted to attain a passing grade in the course.**

## OMM Didactics & Quizzes

Monthly didactics will be added to the canvas course for students to review. Students are required to review each didactic session each month. There will be a quiz associated with each didactic session. A 100% must be achieved to successfully complete (pass) the quiz. There is no time limit on the quiz. Student may attempt each question as often as you like until you get the right answer. Quizzes are due at the end of the month and will lock after the deadline. These will not be reopened unless due to an approved absence. Students who miss a deadline will result in the loss of all points for that quiz.

**Didactic quizzes must be submitted in order to successfully pass the OPP course. Missed quizzes will reopen at the end of the course for zero points to meet this requirement.**

## OPP COMAT

The Osteopathic Principles and Practices Comprehensive Osteopathic Medical Achievement Test (OPP COMAT) is a prerequisite before taking COMLEX Level 2 examinations. 3<sup>rd</sup> year students must pass the OPP COMAT during year three.

OPP COMAT will be administered beginning October 1st or after, during IMED 301, SURG 301 or a selective, whichever occurs first. Students are expected to study for these exams with similar rigor as all other high stakes examinations. Students are **required to pass** the OPP COMAT.

If a grade of Honors (H) is achieved, this will be noted in the student's Medical Student Performance Evaluation (MSPE) and not on the transcript.

## Exam Blueprint

## RECOMMENDED TEXTBOOKS

Kimberly, P.; *Outline of Osteopathic Manipulative Procedures: Kimberly Manual, 2006 Edition* (2008)

Chila, A.G. (ed.): *Foundations for Osteopathic Medicine 3<sup>rd</sup> Edition*, Lippincott Williams & Wilkins, Baltimore, MD, 2011.

Snider, K., Glover, J.: *The Atlas of Common Counterstrain Tender Points* 2013

## STUDENT RESPONSIBILITIES

The OPP curriculum is a self-paced curriculum with specific deadlines for completion of assignments and assessments. The provided module material and the OMM review material are designed to enhance the students understanding of osteopathic principles and encourage integration of OPP, including OMT, into clinical problem solving and patient care.

Prior to performing OMM treatments in the clinical setting, students must first ask permission from their clinical preceptor, and then ask permission from the patient. Students are expected to be able to explain the clinical reasoning for the use of OMM to their preceptor and the risks

and benefits of OMM to the clinical patients. When clinical patients are not available for practice, then volunteer patients may be treated, but the clinical preceptor, resident physician, DME or Regional Assistant Dean must verify these practice treatments.

### Late Assignments and Excused Absences

The OPP curriculum is a self-paced curriculum with specific deadlines for completion of assignments and assessments. Missed deadline of any assignment or assessment will result in the loss of all points for that assignment. No assignments or assessments may be remediated without an excused absence. All course assignments must be submitted to attain a passing grade in the course. Missed assignments will open at the end of the course.

## EVALUATION & GRADING

In order to pass OPP each semester, the student must have a **FINAL GRADE average of at least 75%**. The final grade for the semester will be calculated as follows:

### Semester 1 (OPP 320)

Component	Evaluation Tool	% Of Final Grade
Introduction to OPP module/Quiz	Canvas	<b>0% of the final grade</b>
Module Assessments Each is equally weighted-Example: Module 1 Cardiovascular Module 2 Respiratory Module 3 Gastrointestinal Module 4 Musculoskeletal 1	Canvas	<b>60% of the final grade</b> 15% of the final grade 15% of the final grade 15% of the final grade 15% of the final grade
OMM Practice Log	OMM Log	<b>25% of the final grade</b>
Monthly Didactics	Canvas	<b>15% of the final grade</b>
Component	Final Grade	Minimum Final Grade Average Required
<b>Semester 1 OPP 320</b>	<b>PASS/FAIL</b>	<b>Average of at least 75%</b>

### Online Assessment Item Challenges

Students may submit challenges to online assessment written items by submitting a summary of the module and item and provide reference documentation to support their answer. All challenges will be thoroughly reviewed and adjustments will be made as appropriate by the Course Director. No challenges will be accepted without reference documentation to support student's answer.

### Course Remediation

Students who failed the course will be notified via email with remediation requirements. Assignments will be individualized to the student and focus on specific areas of weakness.