



# Edward Via College of Osteopathic Medicine

## 3<sup>rd</sup> Year Clinical Rotation: Osteopathic Manipulative Medicine

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### ROTATION SYLLABUS

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#### I. Rotation Description

Osteopathic Manipulative Medicine (OMM) is taught throughout the curriculum by faculty physicians who practice primary care and osteopathic medicine and sports medicine. The OMM curriculum is reinforced in the clinical years by providing clinical experiences with VCOM appointed clinical faculty, demonstrating the incorporation of the manipulative medicine skills into clinical practice. Osteopathic manipulative medicine skills are integrated within the various clinical rotations and OMM skills are utilized in some of the clinical experiences as well as taught through workshops in the third year.

The OMM curriculum is directed toward the development of a primary care physician. VCOM faculty believe that whether the students chooses primary care or a medical specialty, they will benefit from a broad based primary care curriculum and a whole patient approach to care. OMM is an important skill for the primary care physician and is therefore taught throughout the pre-clinical and clinical years. There are fellowship tracts for residents who wish to learn more in the area of OMM.

The OMS-3 year marks the transition from the classroom setting to clinical rotations. During the third year, students rotate for 4-week blocks in the following specialties: Family Medicine I and II, Geriatrics, Internal Medicine I and II, Obstetrics and Gynecology, Pediatrics, Psychiatry, and Surgery. The OMM curriculum is integrated into the OMS-3 year to ensure that students continue to learn and practice Osteopathic Principles as well as to demonstrate how to incorporate these principles into the appropriate care of patients in the clinical setting. Curriculum integration occurs through both didactic and practical curricular components.

## II. Course Goals and Objectives

### A. Goals of the Course

The OMM component of the end-of-rotation evaluation is based on your performance in the OMM core competency as described below. Osteopathic Manipulative Medicine - the student should demonstrate the following skills in regards to osteopathic manipulative medicine.

1. Apply osteopathic manipulative medicine successfully when appropriate
2. Perform and document a thorough musculoskeletal exam
3. Utilize palpatory skills to accurately discern physical changes that occur with various clinical disorders
4. Apply osteopathic manipulative treatments successfully

### B. Clinical Performance Objectives

While the end-of-rotation exam is derived from the didactic curriculum and objectives described above in the “Clinical Modules – Required Curriculum” section, the end-of-rotation evaluation completed by your family medicine preceptor is based on clinical core competencies. These core competencies reflect student performance in 6 key areas: communication, problem solving, clinical skills, medical knowledge, osteopathic medicine and professional and ethical considerations. Your end-of-rotation evaluation from your preceptor will be based directly on your performance in these 6 core competencies as described below. The OMM component of the end-of-rotation evaluation is based on your performance in the OMM core competency as described below.

1. Demonstrate competency in the understanding and application of OMT appropriate to each of the core medical specialties. This is achieved through active participation of students in patient care activities in the hospital and at ambulatory sites. Students must demonstrate their knowledge of OPP during the course of patient assessment and management which includes preceptor supervised performance of OMM skills specific to the clinical site and patient condition.
2. Students must integrate Osteopathic Concepts and OMT into the medical care provided to patients where appropriate. Over the course of the third and fourth year, students should assume increasing responsibility for the incorporation of osteopathic concepts in patient management.
3. In addition to Osteopathic manipulation, students must understand and integrate additional Osteopathic Principles and Philosophy into their clinical and patient care activities. Students should:
  - a. Utilize caring, compassionate behavior with patients.
  - b. Demonstrate the treatment of people rather than symptoms.
  - c. Demonstrate understanding of somato-visceral relationships and the role of the musculoskeletal system in disease.
  - d. Demonstrate listening skills in interaction with patients.
  - e. Demonstrate knowledge of and behavior in accordance with the Osteopathic Oath and AOA Code of Ethics.

## III. Rotation Design

### A. OMM Practical Curriculum and Hands-on Workshops

An important component of student medical education during the OMS-3 year involves OMM principles and techniques learned in the OMM lecture and laboratory settings in the OMS 1 and 2 years being expanded upon and applied to patients encountered in the clinical setting during the OMS 3 year. This occurs with the precepting physician and via didactic assignments during the OMS 3 year aimed to

aid the student in more fully integrating OPP and OMM into the clinical assessment and management aspects of patient care.

The main component of the OMS 3 OMM practical/hands-on curriculum occurs in the form of 9 monthly OMM workshops, provided by each clinical site, during the course of the OMS 3 year. The date and time of these workshops will be site dependent and based on factors such as facility and preceptor availability. Click here to view the [OMM Workshop Schedule](#) for the academic year. The topics and objectives for these workshops are to be the same at all clinical sites and VCOM campuses.

OMM workshop attendance is mandatory for all third year students on clinical rotations regardless of which rotation they are on unless an excused absence is obtained. OMS 3 students who miss the required workshops without an excused absence will be called to promotion board, as is consistent with the policy for any unexcused absence on clinical rotations. Any OMS 3 student who misses one of the 9 OMM hands-on workshop will be required to make the session up at a time and location established by the VCOM prior to promotion to the OMS 4 year.

VCOM will provide an OMM workshop at all campuses following the monthly end-of-rotation exam. This workshop is designed for both third year students who missed the workshop in their assigned region or for those students in a region that was unable to provide a workshop during the designated rotation. Students who missed the workshop in their assigned region must return to VCOM to attend the scheduled session there. Students who attend an OMM workshop hosted by faculty in their region during the month are not required to attend the VCOM workshop but are always welcome to attend these additional educational experiences as well.

## **B. OMM Didactic Curriculum**

Students will participate in OMM/OMT educational programs delivered by the College, in educational sessions delivered at their clinical site and at college recognized conferences or CME programs provided by VCOM, VOMA, OMNEE, AOA, SAAO and other VCOM recognized educational programs.

The major component of the OMS-3 didactic curriculum consists of assigned readings in the course textbooks. During their OMS-3 core clinical rotations, each student must complete specific readings in these textbooks to coincide with patient populations and clinical conditions commonly encountered during the core discipline they are rotating with. Students should supplement their learning of the subject matter by reviewing the OMM instructional videos recorded by VCOM faculty posted on [VCOM TV](#).

Students are tested to assure their understanding of the core OMM concepts assigned each month during an end of rotation examination. The exam questions come directly from the assigned readings. Each end of rotation OMM exam will have 10 questions specific to the assigned OMM content for that specific rotation. At the conclusion of the 9 required clinical rotations, students will have completed a total of 90 questions, and the number of questions answered correctly will be compiled and calculated into a final grade which will appear on the transcript as “Clinically Integrated OMM”. A total of 10 additional points will be awarded for completion of required educational and clinical encounter logs, each worth 5 points. Thus, the final grade will be out of a total of 100 points – 90 points for the OMM written exam questions and 10 possible points for completion of the OMM educational log and clinical encounter log.

The syllabi for each clinical rotation includes specific OMM objectives and required reading assignments.

In addition to the written OMM exams, students will participate in a Comprehensive Osteopathic Medical Performance Exam (COMPE), an assessment tool for judging competency in a patient

encounter requiring an interview, examination, assessment, and plan for a variety of complaints encountered as an osteopathic physician. The COMPE is not a component of the Clinically Integrated OMM course grade. However, competency in these skills must be demonstrated during the COMPE in order to matriculate to the fourth year.

### C. Procedure Log

Students are required to maintain a log to identify the procedures performed, and the number of essential patient encounters. The faculty member will verify the information at the end of the rotation either online using a password signature, or by signing the log.

## IV. Credits

2 credit hours

## V. Course Texts

### A. Required Textbooks

- Kuchera, M. & Kuchera, W. (1994). *Osteopathic considerations in systemic dysfunction* (Rev 2<sup>nd</sup> ed.). Dayton, OH: Greyden Press. ISBN: 978-1570741548
- American Osteopathic Association, & Chila, A. *Foundations of osteopathic medicine* (3rd ed.). Baltimore, MD: Lippincott Williams & Wilkins. ISBN: 978-0781766715  
Available in electronic format on the VCOM Library – on LWW Osteopathic Medicine Collection

## VI. Course Grading and Requirements for Successful Completion

### A. Requirements

- Attendance according to VCOM and preceptor requirements as defined in the [College Catalog and Student Handbook](#).
- Completion of all Clinical Modules in the required curriculum.
- [OMM Procedure Log](#)
  - This log is submitted electronically at the end of each clinical rotation month and documentation of all patient encounters during the month in which the student performed an osteopathic structural exam/assessment and/or performed OMT.
  - Students will record patient encounters during the rotation, including the patient's diagnosis and specific OMT techniques used, and will record if the experience is one the student observed or performed with supervision.
  - Completion of the OMM Clinical Encounter log will account for 5% of the OMM grade.
  - This log must be submitted electronically at the end of each month as a requirement for promotion to the OMS-4 year.
- [OMM Workshop Log](#)
  - This log is submitted electronically at the end of each clinical rotation month and documents all OMM didactic and hands on experiences attended by the student. These include, but are not limited to the following:
    - OMM didactic lectures presented at their clinical sites, including attending physicians presentations, resident presentations, grand rounds, journal clubs, and morning reports.
    - VCOM OMM hands-on workshops attended during their OMS-3 year at their clinical sites. Descriptions of these workshops should include supervising physician and/or table trainer as well as the topics covered and/or procedures performed.
    - Any additional didactic or hands on OMM experiences students participated in as part of an educational or organizational conference (AOA, VOMA, SOMA, SAAO, ACOFP, Sports Medicine, etc.)

- This log must be submitted at the end of every clinical rotation month and will be utilized to document attendance at the OMM hands-on workshop as well as any additional educational experiences attended during the month.
- Failure to submit this log at the end of the clinical rotation month will result in the rotation being incomplete and no grade will be posted for that rotation until the log is submitted.
- Students who fail to submit this log within 60 days of the end of the rotation will lose 5 points off their final OMM written grade (representing the 5 points given for completion of the educational logs) and may be called to the Promotion Board.
- Successful completion of the end-of-rotation written exam. The family medicine end-of-rotation exam questions will be derived directly from the specific objectives presented in each of the below modules.

## B. Grading

Students must pass both the "module" and "rotation" portions of the course. All rotations have a clinical rotation grade and clinical modules/exam grade. The clinical rotation grade uses the Honors, High Pass, Pass, Fail system; these grades are not calculated in the GPA. The rotation modules are assigned an exam grade.

Clinical Grading Scale and GPAs						
OMS 3 End-of-Rotation Exam Grades			OMS 3 AND OMS 4 Clinical Rotation Grades		Other Grades	
A	90-100	4.0	H	Honors	IP	In Progress
B+	85-89	3.5	HP	High Pass	INC	Incomplete
B	80-84	3.0	P	Pass	CP	Conditional Pass
C+	75-79	2.5	F	Fail	R	Repeat
C	70-74	2.0			Au	Audit
F	<70	0.0				

## B. Remediation

Students who fail one or more rotations or one or more end-of-rotation exams twice will be referred to the Promotion Board. If a student fails the professionalism and ethics portion of the evaluation he or she may be removed from the rotation and referred to the Professionalism and Ethics Standards Board. No grade will be changed unless the Office of Clinical Affairs certifies to the Registrar, in writing, that an error occurred or that the remediation results in a grade change.

- **Failure of an End-of-Rotation Exam**

Students must pass each end of rotation exam with a C (70%) or better to receive a passing grade for the clinical medical knowledge module. Students who fail an end of rotation exam but pass the clinical rotation evaluation component have a second opportunity to pass the exam within 30 days of notification. If the student passes the remediation exam, the remediated exam grade will be the grade recorded on the transcript and be GPA accountable. If the student fails the second attempt at the end-of-rotation exam, an F is recorded for the exam grade, and the student will be brought before the Promotion Board.

- **Failure of a Rotation**

The student who does not receive a satisfactory evaluation for a clinical rotation in the second semester will receive a failing grade for the rotation and will be brought before the Promotion Board. If the student is allowed to repeat the rotation, all components of the rotation must be repeated. In this case, the "F" grade remains the permanent grade for the first rotation and the

student will receive a new grade for the repeated rotation. The grade will be recorded in a manner that designates that it is a repeated rotation (eg. R-pass).

- **Failure to Make Academic Progress**

Repeated poor or failing performance in a specific competency area on the evaluation form across more than one rotation may also be a reason for a required remediation at the discretion of the Associate Dean for Clinical Affairs in consultation with the clinical chair and the preceptor, and the Promotion Board. In general, rotations should show a progression of improvement in clinical performance. Those students who continually score in the "unsatisfactory" category or repeated "performs some of the time, but needs improvement" and who do not improve over time may be deemed as not making academic progress and, as a result, may be referred to the Promotion Board and be required to complete additional curriculum.

Poor ratings on the clinical rotation evaluation in the professional and ethical areas of the assessment are addressed by the Associate Dean for Clinical Affairs. The Associate Dean may design a remediation appropriate to correct the behavior or if needed may refer the student to the Professionalism and Ethics Board. In the case of repeated concerns in a professional and/or ethical area, the Associate Dean for Clinical Affairs may refer the student to the Campus Dean for a Behavioral Board or Promotion Board hearing. The Campus Dean will act upon this referral depending on the severity and the area of the performance measure. Poor ratings in this area will include comments as to the exact nature of the rating.

## VII. Academic Expectations

Grading policies, academic progress, and graduation requirements may be found in the *College Catalog and Student Handbook* at: <http://www.vcom.edu/handbooks/catalog/index.html>

### A. Attendance

OMM workshop attendance is mandatory for all third year students on clinical rotations unless an excused absence is obtained. Any OMS-3 student who misses a monthly OMM hands-on workshop will be required to make the session up at a time and location established by VCOM prior to promotion to the OMS-4 year.

Students must complete an Excused Absence Clinical Rotations Approval form. Forms are available at: [www.vcom.edu/academics/clinical-forms](http://www.vcom.edu/academics/clinical-forms). The Office of Clinical Affairs requires that the medical student complete and submit this form for any time "away" from clinical rotations. The student must have this form signed by their preceptor and others designated on the form to obtain an excused absence. The form must be completed prior to the beginning of the leave. If an emergency does not allow the student to submit this prior to the absence, the "Excused Absence Clinical Rotations Approval" form must be submitted as soon as the student is physically able to complete the form. In addition to completion of the form, students must contact the Department of Clinical Affairs by 8:00 AM of the day they will be absent due to an illness or emergency and contact the Site Coordinator and preceptor(s). No excused absence will be granted after the fact except in emergencies as verified by the Associate Dean for Clinical Affairs. Regardless of an excused absence, students must complete a minimum of 160 hours.

OMS-3 students who miss the required workshops without an excused absence will be called to Promotion Board and/or Professional and Ethics Standards Board as determined by the Associate Dean, as is consistent with the policy for any unexcused absence on clinical rotations. Clinical site coordinators and preceptors document attendance on the student's rotation evaluation form. This information is reviewed by the Director of 3rd Year Clinical Rotations and the Associate Dean for Clinical Affairs.

A student is expected to arrive on time to all clinical rotations. If a student is late, he or she must notify the site coordinator and the preceptor prior to or at the time they are scheduled arrive. Students must have a reason for being late such as illness or vehicle issues and it is not anticipated that this would occur more than one occasion AND it is important the student call in prior to being late. Repeated tardiness is a reason for a referral to the Promotion Board and/or Professional and Ethics Standards Board as determined by the Associate Dean.

## VIII. Professionalism and Ethics

It is advised that students review and adhere to all behavioral policies including attendance, plagiarism, dress code, and other aspects of professionalism. Behavioral policies may be found in the *College Catalog and Student Handbook* at: <http://www.vcom.edu/handbooks/catalog/index.html>

### A. VCOM Honor Code

The VCOM Honor Code is based on the fundamental belief that every student is worthy of trust and that trusting a student is an integral component in making them worthy of trust. Consistent with honor code policy, by beginning this exam, I certify that I have neither given nor received any unauthorized assistance on this assignment, where “unauthorized assistance” is as defined by the Honor Code Committee. By beginning and submitting this exam, I am confirming adherence to the VCOM Honor Code. A full description of the VCOM Honor Code can be found in the *College Catalog and Student Handbook* at: <http://www.vcom.edu/handbooks/catalog/index.html>

## IX. Clinical Modules for the Family Medicine I Rotation

### 1. Acute Neck Pain

**Reading Assignment:** Foundations of Osteopathic Medicine, Chapter 66: Acute Neck Pain, pp. 979-989

**Learning Objectives:**

- i. Recognize the structure-function approach to differential diagnosis of acute neck pain and identify potential neck pain generators.
- ii. Identify approaches that integrate the entire postural mechanism within the biomechanical model considered for a patient complaining of acute neck pain.
- iii. Identify approaches that integrate the respiratory/circulatory model in the evaluation and treatment of acute neck pain.
- iv. Describe the manifestations of the neurological model in the evaluation and treatment of facilitation resulting from acute neck pain.
- v. Recognize the metabolic and physiologic alterations that occur with acute neck pain using the metabolic energy model.
- vi. Identify approaches that integrate the psychological, behavioral, and social responses to acute neck pain and somatic dysfunction using the behavioral model.
- vii. Discuss the indications for referral to a spine or pain specialist for further evaluation and management of acute neck pain.

### 2. Acute Low Back Pain

**Reading Assignment:** Foundations of Osteopathic Medicine, Chapter 69: Acute Low Back Pain. pp. 1006-1018

**Learning Objectives:**

- i. Summarize the AOA recommended parameters for frequency of the application of OMM for patients with acute low back pain.
- ii. Define acute, subacute and chronic low back pain.
- iii. Discuss the indications for obtaining radiological evaluation in patients with low back pain based on the American College of Physicians and the American Pain Society.
- iv. Differentiate between mechanical and non-mechanical etiologies of acute low back pain, and how their diagnostic evaluation may differ.

- v. In patients presenting with low back pain symptoms, differentiate possible mechanical etiologies including psoas, piriformis, and sacroiliac joint pain.
- vi. Summarize the various considerations for treatment of acute low back pain, specifically related to biomechanical, respiratory-circulation, metabolic-energy, neurologic, and behavioral models.
- vii. Identify self-care recommendations that may be provided to a patient with low back pain.
- viii. Discuss the function of the anterior and posterior muscles of the lumbar spine, including the different layers of the posterior musculature (ie superficial, intermediate and deep layers).

## X. Clinical Modules for the Family Medicine II Rotation

### 1. Upper Gastrointestinal Disorders

**Reading Assignment:** Osteopathic Considerations in Systemic Dysfunction, Upper GI Disorders, pp. 79-93

#### Learning Objectives:

- i. Recognize the pathophysiology of a viscerosomatic reflex of the GI tract.
- ii. Understand the role of viscerosomatic reflexes in typical GI pain patterns.
- iii. Understand the sympathetic innervation to the GI tract and its role in GI pathophysiology.
- iv. Understand the parasympathetic innervation to the GI tract and its role in GI pathophysiology.
- v. Identify lymphatic dysfunctions associated with upper GI pathophysiology.
- vi. Discern the use of lymphatic manipulative techniques in the treatment of upper GI dysfunctions.
- vii. Identify the diagnostic and therapeutic use of Chapman's Reflex Points for upper GI pathophysiology.
- viii. Recognize the appropriate use of OMT in improving sympathetic and parasympathetic innervation to the upper GI tract.

### 2. Cervicogenic Headache

**Reading Assignment:** Foundations of Osteopathic Medicine, Chapter 60: Cervicogenic Headache, pp. 939-945

#### Learning Objectives:

- i. Provide the clinical definition cervicogenic headaches and describe their pathophysiology.
- ii. Provide a differential diagnosis of headaches, and utilize clues in the patient's history to narrow your differential.
- iii. Identify each component of the "five model" Osteopathic approach to patient care when using osteopathic manipulative medicine in the treatment of cervicogenic headache.
- iv. Identify which osteopathic techniques fit each category of the five models when treating cervicogenic headaches.
- v. List the contraindications to using osteopathic manipulative medicine when treating the cervical spine.

## XI. Clinical Modules for the Geriatric Medicine Rotation

### 1. Arthritic Disorders

#### Reading Assignment:

- Foundations of Osteopathic Medicine, Chapter 62: Multiple Small Joint Diseases in the Elderly, pp. 952-959
- Osteopathic Considerations in Systemic Dysfunction, Rheumatologic Disorders, pp. 159-168

#### Learning Objectives:

- i. Discuss how Osteopathic principles contribute to the diagnosis and treatment of arthritic conditions
- ii. Briefly describe the goals of Osteopathic manipulative medicine (OMM) in the treatment of arthritis

- iii. Describe an effective treatment strategy for Rheumatoid Arthritis
- iv. Identify methods to incorporate holistic care in the management of a patient with arthritis
- v. Describe the clinical and diagnostic features of Rheumatoid Arthritis
- vi. Discuss the role of the synovium in osteoarthritic and rheumatic conditions
- vii. Describe the facilitated segments model for pain and spinal cord levels involved in upper and lower extremity arthritic conditions
- viii. Discuss the rationale for initiating osteopathic and other appropriate treatments prior to 8 weeks in the setting of rheumatoid arthritis
- ix. Discuss the rationale for lymphatic drainage of the periarticular areas involved in arthritis
- x. Distinguish between pathophysiologic changes of OA and RA respectively

## **XII. Clinical Modules for the Internal Medicine I Rotation**

### **1. Lower Respiratory Infections**

#### **Reading Assignment:**

- Foundations of Osteopathic Medicine, Chapter 59: Difficulty Breathing, pp. 931-938
- Osteopathic Considerations in Systemic Dysfunction, Lower Respiratory Disorders, pp. 33-52

#### **Learning Objectives:**

- i. Identify the structural areas affected by sympathetic viscerosomatic reflex
- ii. Define “Work of Breathing” as it pertains to the pulmonary system
- iii. Recognize the Osteopathic “Models” of treatment
- iv. Identify the structural areas which may play a role in Vagal nerve facilitation
- v. Identify the common rib dysfunctions found as a result of paroxysmal coughing
- vi. Describe the pulmonary effects of increased parasympathetic tone
- vii. Describe the pulmonary effects of increased acute sympathetic activation
- viii. Describe the pulmonary effects of increased chronic sympathetic activation
- ix. Identify the spinal segments most likely to become facilitated with lung dysfunction
- x. Identify the anterior Chapman’s points for lung dysfunction

## **XIII. Clinical Modules for the Internal Medicine II Rotation**

### **1. Cardiovascular Disease**

#### **Reading Assignment:**

- Foundations of Osteopathic Medicine, Chapter 55: Adult with Chronic Cardiovascular Disease, pp. 889-902
- Osteopathic Considerations in Systemic Dysfunction, Cardiovascular Disorders, pp. 53-78

#### **Learning Objectives:**

- i. Outline the impact and effects of the autonomic nervous system on the function of the cardiovascular system and describe the levels for the parasympathetic and sympathetic contributions.
- ii. Describe the important impact and effects of the lymphatic system on the function of the cardiovascular system.
- iii. Relate somatic changes of the thoracic spine to effects in cardiovascular system.
- iv. Describe key OMM treatment approaches utilized in the care of patients with hypertension and specifically how treatments might affect sympathetic and parasympathetic tone as well as lymphatic return.
- v. Describe key OMM treatment approaches utilized in the care of patients with congestive heart failure and specifically how treatments may affect sympathetic and parasympathetic tone as well as lymphatic return.
- vi. Identify OMM treatment approaches to the care of patients with atherosclerosis, cardiac arrhythmias and myocardial infarction. Relate specifically how treatments might affect sympathetic and parasympathetic tone as well as lymphatic return.

- vii. Identify wellness concepts such as diet, exercise, stress reduction and smoking cessation as components of a comprehensive treatment program for cardiovascular disease.
- viii. Identify how the biomechanical, respiratory, neurological, metabolic and behavioral models describe contributions to the development of symptomatic disease and address treatments for each component

#### **XIV. Clinical Modules for the Obstetrics and Gynecology Rotation**

##### **1. Osteopathic Considerations in Normal Pregnancy**

###### **Low Back Pain in Pregnancy**

###### **Lower Extremity Swelling in Pregnancy**

###### **Reading Assignment:**

- Foundations of Osteopathic Medicine, Chapter 63: Lower Extremity Swelling in Pregnancy and Chapter 64: Low Back Pain in Pregnancy, pp. 961-973
- Osteopathic Considerations in Systemic Dysfunction, The Obstetrical Patient, pp. 149-158.

###### **Learning Objectives:**

- i. Identify the 2 most common complaints of an obstetrical patient as the pregnancy progresses.
- ii. Name the causes (differential diagnosis) for a pregnant patient with lower extremity edema.
- iii. Identify common osteopathic structural findings in pregnancy which occur to accommodate the shifting center of gravity.
- iv. Name the fascial regions/diaphragms which can restrict lymphatic flow.
- v. Identify structures / regions to that may be treated with OMT in order to balance the autonomic nervous system.
- vi. From a list, identify common diagnoses/approaches to be considered in an obstetrical patient with low back pain.
- vii. Distinguish the 5 models used in osteopathic patient care for an obstetrical patient with lower extremity edema and low back pain.
- viii. Discern an Osteopathic approach to the diagnosis and treatment of an obstetrical patient with somatic dysfunction of the lumbar spine, sacrum, pelvis, and lower extremity.

#### **XV. Clinical Modules for the Pediatric Medicine Rotation**

##### **1. The Common Cold**

**Reading Assignment:** Osteopathic Considerations in Systemic Dysfunction, The Common Cold, pp. 23-32

###### **Learning Objectives:**

- i. Discuss the benefits of using OMT treatment in a patient with a URI
- ii. Recall the effects of the sympathetic and parasympathetic nervous system on congestion and nasal mucosa
- iii. Identify specific areas of the body which may be treated with OMT to help in alleviating URI symptoms
- iv. Describe the effect the cranial rhythmic impulse has on sinus drainage and which bones are most directly involved.

##### **2. Uncontrolled Asthma**

**Reading Assignment:** Foundations of Osteopathic Medicine, Chapter 54: Uncontrolled Asthma, pp. 883-888

###### **Learning Objectives:**

- i. Discuss the benefits of using OMT in a patient with asthma.
- ii. Recognize the specific areas of the musculoskeletal system which, if dysfunctional, may contribute to or exacerbate respiration.

### 3. Ear Pain

**Reading Assignment:** Foundations of Osteopathic Medicine, Chapter 58: The Child with Ear Pain, pp. 918-930

**Learning Objectives:**

- i. Identify different etiologies of ear pain.
- ii. Identify the recommended osteopathic treatments for acute otitis media
- iii. Describe the relationship between the cranial base and Eustachian tube.
- iv. Identify the recommended osteopathic treatments for acute otitis media
- v. Describe the relationship between the cranial base and Eustachian tube.

## XVI. Clinical Modules for the Psychiatry Rotation

### 1. Psychoneuroimmunology – Basic Mechanisms

**Reading Assignment:** Foundations of Osteopathic Medicine, Chapter 17: Psychoneuroimmunology – Basic Mechanisms, pp. 276-283

**Learning Objectives:**

- i. Describe the response of the HPA axis and sympathetic nervous system to stressors.
- ii. Identify the common medical illnesses that are associated with an increased prevalence rate of depression.
- iii. Name the areas of the immune system that are affected by stressors.
- iv. Identify the common medical conditions that can present with psychiatric manifestations.

### 2. Psychoneuroimmunology – Stress Management

**Reading Assignment:** Foundations of Osteopathic Medicine, Chapter 18: Psychoneuroimmunology – Stress Management, pp. 284-297

**Learning Objectives:**

- i. Name the 4 most common behavioral consequences of stress.
- ii. Identify the signs/symptoms of depression, anxiety, substance abuse and insomnia.
- iii. Identify the available treatment options for depression/anxiety/substance abuse and insomnia.
- iv. Discuss the concept of socialization resulting from depression/anxiety/substance abuse and insomnia.
- v. Describe how to interpret structural interview questions in relation to a particular psychiatric diagnosis.

## XVII. Clinical Modules for the Surgery Rotation

### 1. Abdominal Pain

**Reading Assignment:** Foundations of Osteopathic Medicine, Chapter 68: Abdominal Pain, pp. 999-1005

**Learning Objectives:**

- i. Identify five models of osteopathic patient care that may be utilized in the management of patients with abdominal pain.
- ii. Identify 3 ways osteopathic treatment may still benefit a patient in which OMT is not considered the primary treatment for the patient.
- iii. List the steps of the THOMAS TEST (regarding psoas spasm). Identify one condition that will give a false positive test and one condition that may result in a false negative test.
- iv. Identify 4 positions associated with psoas spasm and the mechanism that may initiate psoas muscle spasm
- v. Describe the common osteopathic structural findings associated with psoas syndrome.
- vi. Identify the steps that follow the obstruction of a hollow viscous and lead to ischemia (metabolic energy model).
- vii. Identify 3 behavioral issues that may cause abdominal pain (behavioral model).

- viii. Describe the mechanism that explains why visceral pain is initially perceived as vague in location and quality (neurological model).
- ix. Describe the theory of referred pain (neurological model) and identify where gallbladder pain may be referred to.

## 2. Lower Bowel Disorders

**Reading Assignment:** Osteopathic Considerations in Systemic Dysfunction, Lower Bowel Disorders, pp. 95-106

### Learning Objectives:

- i. List the areas of sympathetic hyperactivity that may reflect a gastrointestinal disease process.
- ii. List the signs symptoms associated with hypersympathetic stimulation of the lower GI system.
- iii. Describe the parasympathetic innervation to the colon.
- iv. Describe the structural and physiological association between the drainage of lymphatic fluid from the intestines and the thoracic diaphragm.
- v. List the signs symptoms associated with parasympathetic hyperactivity of the lower GI system
- vi. List the signs symptoms associated with parasympathetic hypoactivity of the lower GI system
- vii. Describe the suggested protocol for providing Osteopathic manipulative treatment for post-operative patients stages (I, II, III)
- viii. Describe supportive manipulation for patients with sympathetic dominant colon complaints (constipation, abdominal pain, flatulence, distention)
- ix. Describe supportive manipulation for patients with parasympathetic dominant colon complaints (headache, nausea, vomiting, diarrhea, cramps)
- x. Describe supportive manipulation for patients with other related complaints in all diseases of the colon where lymphatic congestion may be a problem.