



# Edward Via College of Osteopathic Medicine

MED 8121/MED 8122

Clinical Integration of Osteopathic Manipulative Medicine I and II  
Academic Year 2019 – 2020

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## COURSE SYLLABUS

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**Jos Edison, D.O.**  
Chair, Osteopathic Manipulative  
Medicine  
Auburn Campus  
Phone: 334-442-4012  
[jedison@auburn.vcom.edu](mailto:jedison@auburn.vcom.edu)



**David Harden, D.O.,  
FAAFP**  
Chair, Osteopathic Manipulative  
Medicine  
Virginia Campus  
Phone: 540-231-7820  
[dgharden@vcom.vt.edu](mailto:dgharden@vcom.vt.edu)



**Bethany Powers, D.O.**  
Chair, Osteopathic Manipulative  
Medicine  
Carolinas Campus  
Phone: 864-327-9990  
[bpowers@carolinas.vcom.edu](mailto:bpowers@carolinas.vcom.edu)

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### I. Course 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 of diagnosis and treatment 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 an osteopathic 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. 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 student should demonstrate the following skills in regard to osteopathic manipulative medicine.

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

## III. Course Design

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. 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.

### A. OMM Didactic Curriculum

One component of the OMS 3 Clinical Integration of Osteopathic Medicine course is the didactic curriculum consists of 5 assigned PowerPoints specifically linked to the 5 OMM end of period workshops for the fall semester and 5 assigned PowerPoints specifically linked to the 5 OMM end of period workshops for the spring semester. These PowerPoints, and any supplemental readings supplied at the time of the workshop, are specific to the third year OMM course and are in addition to the core rotation readings. The core syllabi for each clinical rotation may also include specific OMM objectives and required reading assignments. The student is responsible for both the core rotation readings as well as the OMM clinically integrated workshop PowerPoint and OMM workshop supplemental readings if assigned.

The workshop and its designated PowerPoint will coincide with patient populations and clinical conditions commonly encountered during clinical practice and the core clinical disciplines. Students should supplement their learning of the subject matter by reviewing the OMM workshop PowerPoints, as well as any supplemental readings. Students may also view instructional videos recorded by VCOM faculty and posted on VCOM TV linked to each OMM workshop.

Students are tested to assure their understanding of the core OMM concepts from the PowerPoints and other workshop materials assigned for each individual workshop.

In addition to the written OMM quizzes and OMM workshops, students will participate in a Comprehensive Osteopathic Medical Performance Exam (COMPE) during their OMS 3 year, 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 OMM/OMT must be demonstrated during the COMPE in order to matriculate to the fourth year.

### B. OMM Hands-on Workshops

The other component of the OMS 3 Clinical Integration of Osteopathic Medicine course occurs in the form of 5 monthly OMM workshops in the fall semester and 5 monthly OMM workshops in the spring semester, 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 fall and spring semester of 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. If a student has an excused absence and must miss an OMM workshop, they will be responsible for the material of the workshop and making up an equivalent amount of time as approved by the OMM Discipline Chair. This make-up is required to be completed prior to promotion to the OMS 4 year. OMS 3 students who miss the required workshops without an excused absence may be called to the Promotion Board, as is consistent with the policy for any unexcused absence on clinical rotations. Any student on an alternate schedule will be responsible for reaching out to the OMM Discipline Chair at their campus to come up with an appropriate plan to meet their OMM workshop requirements.

Students on a core elective rotation, who may not be able to attend that period's OMM workshop, will be responsible for completing the PowerPoint and reading material of the workshop and will be required to take the OMM quiz at the next available end-of-rotation testing time. Also, for students who are on a core elective rotation, the OMM quiz scheduled for that period may be administered at their elective site on the usual VCOM end-of-rotation testing time, if appropriate testing settings are available, or may be added to the following end-of-rotation testing time if no appropriate testing setting is available.

The VCOM Carolinas Campus and Virginia Campus will provide an OMM hands-on workshop at both campuses following the monthly end-of-rotation exam. This workshop is designed for 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 period are not required to attend the VCOM workshop but are always welcome to attend these additional educational experiences as well.

Students may also have opportunities for additional hands-on OMM by attending, and are encouraged to attend, VCOM recognized educational programs as available through OMNEE, AOA, SAAO Virginia Osteopathic Medical Association (VOMA), South Carolina Osteopathic Medical Society (SCOMS), and Alabama Osteopathic Medical Association (AOMA), etc.

### **C. Logging Patient Encounters, Procedures and Workshops**

Students are required to maintain a log to identify the procedures performed and the number of essential patient encounters in the CREDO application. Students are also required to document all OMM workshops they have attended and log that information into the CREDO application as well. All students must review these logs with their preceptors prior to the end of the rotation period, as required by the final preceptor evaluation form. Students are encouraged to periodically review their CREDO entries with their preceptor during the rotation period.

## **IV. Credits**

8121 – 1 Credit Hour

8122 – 1 Credit Hour

## **V. Course Texts**

### **A. Required Textbooks and Readings**

- American Osteopathic Association, & Chila, A. (2011). *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

- Nicholas, A.S., & Nicholas, E.A. (2016). *Atlas of Osteopathic Techniques* (3<sup>rd</sup> ed.). Baltimore, MD: Lippincott Williams & Wilkins, 2015. ISBN: 978-1451193411 (retail price \$165.99) – Available in VCOM's eLibrary in LWW Osteopathic Medicine Collection
- Additional readings may be assigned specific to each OMM workshop at least 2 weeks prior to the workshop date

## VI. Course Requirements for Successful Completion

- Attendance according to VCOM and preceptor requirements as defined in the [College Catalog and Student Handbook](#).
- Completion of all Modules in the required curriculum.
- Logging OMM Patient Encounters, Procedures and Workshops in CREDO:
  - Students are required to log all OMM patient encounters and procedures into the CREDO application during the core clinical rotation for the period, in which the student performed an osteopathic structural exam/assessment and/or performed OMT. Students are also required to document all OMM workshops they have attended and log that information into the CREDO application as well. All students must review these logs with their preceptors prior to the end of the rotation period, as required by the final preceptor evaluation form. Students are encouraged to periodically review their CREDO entries with their preceptor during the rotation period. These reviews should stimulate discussions about cases and learning objectives, as well as identify curriculum areas the student may still need to complete. CREDO can be accessed at: <https://credo.education/>
- Successful completion and passage of the end-of-period quizzes.

## VII. Course Grading

### A. Quizzes

Students are tested to assure their understanding of the core OMM concepts from the PowerPoints and other workshop materials assigned for each individual workshop.

- Each end-of-period OMM quiz will include 10 questions specific to the OMM PowerPoint for the workshop previously attended.
- At the conclusion of the OMM fall semester for OMS 3, students will have completed a total of 5 hands-on-workshops and 4 OMM quizzes. The 4 quizzes combined will total 100 points. The total points earned out of 100 will be calculated into a final grade for the fall Clinical Integration of Osteopathic Manipulative Medicine course, which will appear on the transcript as OMS 3 Clinical Integration of Osteopathic Manipulative Medicine I.
- At the conclusion of the OMM spring semester for OMS 3, students will have completed a total of 5 hands-on-workshops and 4 OMM quizzes. The 4 quizzes combined will total 100 points. The total points out of 100 will be calculated into a final grade for the spring OMS 3 Clinical Integration course, which will appear on the transcript as OMS 3 Clinical Integration of Osteopathic Manipulative Medicine II.
- The quiz will be taken at the same time and place as the end-of-rotation exams for the core rotations. For example, OMM Workshop 1 occurs at the end of Period 1. The OMM quiz for the Period 1 workshop will be given on the date of the end-of-rotation exam for Period 2, thus allowing students one full period to review the PowerPoint and information from that workshop before taking the exam.
- Students must pass each end-of-period OMM quiz with a C (70%) or better to receive a passing grade on that quiz.

- Students must score a C (70%) or better on the final grade, which is made up of the cumulative scores of all 4 quizzes, to pass the course. If the student scores less than 70% on the final grade, an “F” will be recorded for the final grade and the student will be brought before the Promotion Board.

Semester	Period	Workshop and Quiz	Contribution of Each to Final Grade
Fall Semester			
	Period 2	Workshop 1 – Family Medicine No quiz	
	Period 3	Workshop 2 – Clinical Primary Care Quiz 1 on workshop 1 (FM) material	25%
	Period 4	Workshop 3 - Geriatrics Quiz 2 on workshop 2 (CPC) material	25%
	Period 5	Workshop 4 – Internal Medicine 1 Quiz 3 on workshop 3 (Geriatrics) material	25%
	Period 6	Workshop 5 – Internal Medicine 2 Quiz 4 on workshop 4 (IM1) material	25%
Spring Semester			
	Period 7	Workshop 1 – Obstetrics and Gynecology No quiz	
	Period 8	Workshop 2 - Pediatrics Quiz 1 on workshop 1 (Ob/Gyn) material	25%
	Period 9	Workshop 3 - Psychiatry Quiz 2 on workshop 2 (Pediatrics) material	25%
	Period 10	Workshop 4 - Surgery Quiz 3 on workshop 3 (Psychiatry) material	25%
	Period 11	Workshop 5 - Billing, Coding, & Technique Review Quiz 4 on workshop 4 (Surgery) material	25%

## I. Grading Scale

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				

## II. Remediation

- **Failure of an End-of-Period OMM Quiz**

Students must pass each end-of-period OMM quiz with a C (70%) or better to receive a passing grade. Students who fail an end-of-period OMM quiz will be required to remediate the quiz. To remediate, the student will write up a case as directed below. The case must be turned in no later than 10 AM on the Friday of the following week. Any late submissions will result in a failing grade being recorded for the quiz remediation. Cases should be emailed to both the campus OMM Discipline Chair and the campus OMM Administrative Assistant/Education Specialist. The remediated quiz grade will be recorded as the higher of the two grades, not to exceed 70%.

Cases: The student shall pick one case option from the list sent to them at the time of notification of their failure. They will create a list of at least 10 anticipated somatic dysfunctions based on the case and document why they think each dysfunction would be present. They must then write how they would treat the dysfunction, using appropriate techniques based on the case.

Failure to pass the remediation in the required timeframe will result in the student's original quiz grade minus 10% being recorded officially as the student's quiz grade.

Any student who has failed more than 2 quizzes during a semester will be required to have a phone interview with the Discipline Chair and the student may be brought before the Promotion Board.

- **Failure of the Course**

If a student fails the course the student will receive an "F" grade for the course and will be brought before the Promotion Board.

## III. Academic Expectations

Grading policies, academic progress, and graduation requirements may be found in the [College Catalog and Student Handbook](#).

### 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 contact hours up as deemed appropriate by the Discipline Chair.

The Office of Clinical Affairs requires that the medical student complete and submit an Excused Absence Clinical Rotations Approval form for any workshop missed. 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 and must be provided to the DSME and the Office of Clinical Affairs through the site coordinator. 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, the Site Coordinator, and the preceptor's office by 8:30 AM of the day they will be absent due to an illness or emergency. 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 are still responsible for and must complete all workshop PowerPoints and reading materials in order to pass the rotation. Any time missed must be remediated prior to promotion to the OMS 4 year.

Students are 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 considered as unprofessional behavior and is a reason for dismissal from a rotation. Students with repeated tardiness will be referred to the PESB. Tardiness is defined as more than 5 minutes after the scheduled time the preceptor designates as the expected arrival time.

#### IV. 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](#).

##### 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](#).

#### V. OMM Workshops Fall Semester

##### 1. Family Medicine I OMM Workshop

###### A. Acute Neck Pain

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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.
- viii. Recognize and identify an appropriate use of OMT in acute neck pain.

###### B. Acute Low Back Pain

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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).
- ix. Recognize and identify an appropriate use of OMT in acute low back pain.

## 2. Primary Care: Rural and Medically Underserved Populations OMM Workshop

### A. Upper Gastrointestinal Disorders

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

#### 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.

## 3. Geriatrics OMM Workshop

### A. Arthritic Disorders

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

#### 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. Identify OMM treatment approaches to the care of patients with 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 lymphatic drainage of the periarticular areas involved in arthritis

- ix. Distinguish between pathophysiologic changes of OA and RA respectively

#### 4. Internal Medicine I OMM Workshop

##### A. Lower Respiratory Infections

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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
- xi. Recognize and identify an appropriate OMT treatment plan in lower respiratory infections.

#### 5. Internal Medicine II OMM Workshop

##### A. Cardiovascular Disease

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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

## VI. OMM Workshops Spring Semester

### 1. Obstetrics and Gynecology OMM Workshop

#### A. Osteopathic Considerations in Normal Pregnancy/Low Back Pain in Pregnancy/Lower Extremity Swelling in Pregnancy

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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. Identify an Osteopathic approach to the diagnosis and treatment of an obstetrical patient with somatic dysfunction of the lumbar spine, sacrum, pelvis, and lower extremity.

### 2. Pediatric OMM Workshop

#### A. The Common Cold

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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.

#### B. Asthma

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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.
- iii. Identify OMM treatment approaches to the care of patients with acute and chronic asthma

### C. Ear Pain

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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.

### 3. Psychiatry OMM Workshop

#### A. Psychoneuroimmunology – Basic Mechanisms

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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.
- v. Identify OMM treatment approaches to the care of patients with depression, anxiety, and/or other psychiatric diagnosis

#### B. Psychoneuroimmunology – Stress Management

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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.
- vi. Identify OMM treatment approaches to the care of patients with substance abuse, insomnia, and high stress environments.

#### C. Headaches

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**Learning Objectives:**

- i. Provide the clinical definitions of tension vs migraine vs cluster 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 headaches.
- iv. Identify OMM treatment approaches to the care of patients with tension headaches, sinus headaches and migraines.
- v. List the contraindications to using osteopathic manipulative medicine when treating the cervical spine.

#### 4. Surgery OMM Workshop

##### A. Atelectasis and Mechanical Ventilation

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**Learning Objectives:**

- i. Identify ways osteopathic treatment may still benefit a patient in which OMT is not considered the primary treatment for the patient.
- ii. List the areas of sympathetic hyperactivity that may reflect a respiratory disease process.
- iii. List the signs symptoms associated with hypersympathetic stimulation of the respiratory system.
- iv. List the signs symptoms associated with hyperparasympathetic stimulation of the respiratory system.
- v. Describe the common osteopathic structural findings associated with atelectasis.
- vi. Describe the common osteopathic structural findings associated with mechanical ventilation.
- vii. Identify OMM treatment approaches to the care of patients with atelectasis and those on mechanical ventilation.

##### B. Post-op Ileus

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**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 postoperative patients stages (I, II, III)
- viii. Describe supportive manipulation for patients with sympathetic dominant colon complaints
- ix. Describe supportive manipulation for patients with parasympathetic dominant colon

#### 5. Billing, Coding and Technique Review OMM Workshop

##### A. Billing and Coding

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

**Learning Objectives:**

- i. Identify appropriate documentation of somatic dysfunctions.
- ii. Identify appropriate documentation of osteopathic treatment modalities.
- iii. Recall the components an appropriate procedure note for an OMM treatment.
- iv. Recognize common errors in OMM procedure note documentation.
- v. Identify appropriate CPT and E/M codes for Osteopathic treatment encounters.
- vi. Recall proper use of CPT modifiers as it applies to OMM billing.
- vii. Recall resources available for OMM coding and billing review and assistance.

## **B. Technique Review**

**Reading Assignment:** Readings may be assigned specific to each OMM workshop at the time of the workshop.

### **Learning Objectives:**

- i. Recall common Osteopathic Techniques used in an outpatient clinical setting.
- ii. Recall common Osteopathic Techniques used in an outpatient clinical setting.
- iii. List relative and absolute contraindication to those common techniques.
- iv. Give examples of appropriate Osteopathic treatment plans based on a variety of chief complaints.