

Doctor of Osteopathic Medicine

COM 5121 - Osteopathic Principles and Practice I

I. Course Information

Course: COM 5121 - Osteopathic Principles and Practice I

Graduating Class:

Class of 2025

Contact Hours:

19 lecture & 15 practical training session

Semester Credit Hours: 3.5

Semester and Year: Fall 2021

Start Date:

8/12/2021

End Date:

12/3/2021

Course Delivery:

Lecture and Lab

Location:

FTL- Steele Auditorium/Zoom and Don Taft University Center South Court
Tampa Bay Regional – 1801/Zoom and OPP Lab

Prerequisites:

Matriculation into the M1 NSU-KPCOM curriculum

Syllabus:

Syllabus is subject to change.

II. Course Management Team

Course Director:

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Predoctoral OPP Fellows

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Marianne Cortes, Fort Lauderdale Campus
Sarah Lambros, Fort Lauderdale Campus
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Nishma Shah, Fort Lauderdale Campus
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Faculty - Student Appointment Times

You may contact OPP faculty members or pre-doctoral OPP fellows via NSU email. For questions on lecture material, students are encouraged to contact the faculty member who provided the lecture. You may also contact the Davie OPP administrative assistant at 954-262-1445 or the Clearwater OPP administrative assistant at 813-574-5354.

III. Course Description

OPP I presents the first unit of a five course sequence that addresses osteopathic theory, philosophy, and manipulative procedures. OPP I provides an introduction to the general principles and techniques of osteopathic diagnosis of the axial skeleton and paraspinal regions. Student Doctors will be exposed to basic terminology and examination skills through lecture, demonstration and hands-on performance.

Course Information:

For all issues pertaining to Year 1, the initial contact is either Dr. Qureshi (Davie), Dr. Barry (Davie) or Dr. Mehra (Tampa Bay Regional). The OPP department works as a team. We will discuss and make decisions on most issues together; however, all final decisions are the purview and responsibility of the OPP department chair.

This syllabus is not a contract and may be changed at any time with notice to the class. Course points or course schedules may change due to schedule changes. All changes will be announced to the class as soon as possible.

Important announcements, schedule changes, and other announcements will be sent via NSU e-mail to all students. You are responsible for checking your e-mail daily for such announcements. All e-mail communication to faculty and Predoctoral OPP Fellows must be through your NSU e-mail account. E-mails that originate through non-NSU e-mail accounts will not be answered by faculty and Predoctoral OPP Fellows.

NSU Class Recordings Policy

Class content throughout this course may be recorded in accordance with the NSU Class Recording policy. If class content is recorded, these recordings will be made available to students registered for this course as a supplement to the classroom experience. Recordings will be made available to all students who were registered to attend the live offering of the class, regardless of a students' section or discipline, or whether the student is participating in the course online. If recordings are intended to be accessible to students or third parties who were not registered for the live offering of the class, students' personally identifiable information will be removed or redacted from the recording, unless (1) their written consent to such disclosure was previously provided, or (2) the disclosure is permissible in accordance with the Family Educational Rights and Privacy Act ("FERPA").

Students are prohibited from recording audio or video, or taking photographs in classrooms (including online classes) without prior permission from the instructor or pursuant to an approved disability accommodation, and from reproducing, sharing, or disseminating classroom recordings to individuals outside of this course. Students found engaging in such conduct will be in breach of the Student Code of Conduct and subject to disciplinary action.

Discussion Boards

This course may offer a Discussion Board through Canvas. The Discussion Boards can be found on the left-hand navigation pane and have been set up by lecture. Students can post questions in the Discussion Board that are related to the specific lecture content. If a question has not been answered within 48 hours, the course director should be contacted. All students will be able to see questions and answers. Answers to questions will not be guaranteed if asked within 1 business day of examinations. For concerns outside of course work, please email the individual faculty member.

Practical Training Session Information

The class will be divided into three major groups (designated 1, 2, and 3). These large groups will be further divided into smaller groups for the practical training sessions. Each practical training session group will be assigned to a practical instructor. OPP table assignments will change

each week in order for students to practice on different students each week. These table assignments will be posted to the OPP I Canvas shell every week. These assignments will be posted outside the OPP lab each week, and the groups will rotate through the instructors over the course of each semester. Student Doctors are expected to work with all members of their practical training session group during the course of the semester.

1. Student doctors are required to view the practical session recording prior to the live practical training session. In each 1.5 hour live practical training session, points may be lost for tardiness, absence, improper attire, improper hygiene, and lack of professionalism. Each of these cases will be discussed below.
2. Professionalism and respect for colleagues is an inherent value of osteopathic practitioners. Behavior is shaped by practice. Student doctors are expected to think and act like a physician at all times in this practical training session. If your behavior or actions fall short, a faculty member will ask the student doctor to leave the practical training session. Student doctors will subsequently lose points for the practical training session, and the practical training session must then be remediated as an unexcused absence. Make-up for that will be followed as in #6 below. The course coordinators and/or Department Chair will also meet with the student doctor to discuss behavioral improvements.
3. Attendance will be taken by the department faculty and Fellows at each practical training session at the start of each practical training session. It is the responsibility of the Student Doctor to be seated on his/her table at that time. Student Doctors arriving late (up to 10 minutes after onset of the practical training session) will lose one point. Student Doctors arriving 10 minutes or more after the onset of the practical training session (20 minutes after the hour) will be given an unexcused absence and will lose two points for the practical training session consistent with the policy outlined in #6 below (although they are welcome to stay and participate). The unexcused absence will be made up with the Predoctoral OPP Fellows as with any unexcused absence, as outlined in #6.
4. **Student Doctors are responsible to verify their attendance in each practical training session.**
5. Student Doctors who have an excused absence from a practical training session must make up the practical training session with the Predoctoral OPP Fellows by one week (7 days) following the missed practical training session. The following are considered to be excused absences for all practical training sessions:
 - A. Death and funeral in the immediate family (spouse, partner, parent, grandparent, in-law, sibling, child, aunt, uncle, niece, nephew)
 - B. Personal illness, only when diagnosed and documented in writing by the physician who evaluated and treated the student at the time of the absence.
 - C. University sanctioned travel or function, documented no less than two weeks in advance by the office of Student Services.
The office of Student Services will be responsible for assuring that the course directors receive the appropriate documentation.
 - D. Other extenuating circumstances which must be approved by the course director, with the appropriate documentation for the reason.

** ALL excused absence documentation must be approved by the Office of Student Affairs.

6. Unexcused and excused absences from a practical training session must be made up by one week (7 days) following the missed practical training session with the Predoctoral OPP Fellows at the announced make-up time. Prior to the make-up appointment time, the student doctor is required to watch the video on Canvas for the practical training session that was missed. The student doctor must watch the entire video and write a one-page summary of the practical training session and bring it to the make-up session with the Predoctoral OPP fellow. The student doctor will not be allowed to make-up the session without the one-page summary. It is the responsibility of the student doctor to bring a volunteer partner from their class to the make-up session. Students may not bring any person external to the OPP

course as their partner. The make-up times must be scheduled with a Predoctoral OPP Fellow, and are typically scheduled the following week at the end of the practical training sessions for that day. If the student misses a scheduled make-up time it will count as an unexcused absence. The missed practical training session must still be made-up within one week of the missed make-up time. Student Doctors will lose points for unexcused absences as follows:

- A. First unexcused absence – 2 points
 - B. Second unexcused absence – 5 additional points
 - C. Third unexcused absence – 10 additional points (with no chance to receive extra credit points)
 - D. If a Student Doctor has four unexcused practical training session absences during a semester, she/he will fail and be required to remediate the practical portion of the course (if eligible) during the remediation period.
7. Student Doctors will not be allowed to take midterm or final practical exams until all practical training sessions have been completed (including remediation's). Make-up of missed practical training sessions must be completed by 5 pm Friday of the week prior to the exam. If this is not done, the student will be required to complete the practical training session make-up by 5 pm Friday of the week of the exam and the student will receive a zero for the practical exam. The exam will then be given as a three-station examination within 10 business days and the highest grade a student can obtain will be a 70%. Student Doctors with excused absences within the last two weeks prior to a practical will be handled at the department's discretion.
 8. The Predoctoral OPP Fellows and Sports Medicine Residents/Fellows will serve as practical training session instructors, will remediate absences, and will be involved in student testing during the practical examinations.
 9. Proper attire for all practical training sessions and all practical examinations includes NSU navy blue shorts (available only in the NSU bookstore), NSU tee-shirts or NSU society tee-shirts, and sports bras (or bathing suit tops) for females. This dress code will be enforced beginning with the second week of class. During the first week of class, the following will be acceptable dress code for the practical training session: gym shorts, non-offensive tee-shirt, and sports bras (or bathing suit tops) for females. Shoes are not to be worn in the practical training session. Please wear socks. For your convenience, locker rooms are adjacent to the practical training session. Student doctors will need to provide their own lock. Student Doctors who are improperly attired will lose one point from the total possible points in the course. All book bags and back packs need to be placed at the east end of the in the OPP practical training session room in an area designated by the course director, prior to the start of the practical training session. Please turn all cell phones to silent mode during all lectures and practical training sessions and place them in your bags. The use of i-pads during the practical training session should only be for reviewing lecture and/or practical training session handout materials.
 10. Proper hygiene includes daily bathing, clean clothes and short clean fingernails. Body piercing must be removed when that section of the body is being examined. No dangling or dangerous jewelry is allowed at anytime. Student doctors who do not adhere to proper hygiene will be dismissed from practical training session. The session must be made up with a Predoctoral OPP Fellow as an unexcused absence. Points will be deducted as in the policy of #6 above.
 11. Student doctors must notify the course directors immediately of any pre-existing health problems that preclude examination or treatment. Appropriate medical documentation will be required. Student Doctors will be excused from serving as patients during practical training sessions or examinations for documented contraindications (confirmed by Dr. Barry at FTL or Dr. Mehra at TBR). Upon confirmation, students will be issued a note outlining medical restrictions. It is the responsibility of the student doctor to show this note to his/her table trainer or examiner at each practical training session and ensure that it is addressed prior to the first practical examination, ideally at the beginning of the semester.
Students who present to the practical training session/exam without the previous approved documentation of restrictions, will

be excused from the practical training session/exam and will follow the unexcused absence policy. Students who refuse to serve as patients during practical training session/examinations for any other reason will be dismissed from that practical training session /examination session. The session must be made up with a Predoctoral OPP Fellow as an unexcused absence. Points will be deducted as in the policy of #6 above.

12. If a student doctor is injured as a result of any activity in the OPP practical training session, the student doctor is to notify the table trainer and/or faculty member immediately.
13. No eating or drinking is allowed in any practical training session or lecture, although water bottles that are sipper or capped may be used in the practical training session.

IV. Course Objectives / Learning Outcomes

1. Discuss the history and philosophy of osteopathic medicine.
2. Describe the principles of osteopathic manipulative treatment.
3. Demonstrate basic osteopathic palpatory skills and selected osteopathic treatments: Manipulative treatments of the axial skeleton and pelvis will be taught, along with an introduction to muscle energy, counterstrain, soft tissue, lymphatic, and myofascial techniques.

Core Competencies:

NSU-COM has adopted the AACOM Osteopathic Core Competencies for Medical Students. This course addresses the following core competencies:

- I – 1.e.
- I – 2.b., 2.d., 2.e., 2.f., 2.g.
- I – 3.c.1., 3.c.2., 3.d., 3.e., 3.f., 3.g., 3.h., 3.i.
- I – 5.b., 5.c.
- I – 6.a., 6.c.
- II – 1.a., 1.d.
- II – 2.b.

Specific information regarding these competencies can be found on the AACOM website.

V. Materials and Resources

Course Required Texts and Materials:

An Osteopathic Approach to Diagnosis and Treatment (Fourth Edition), Eileen L. Di Giovanna, Christopher J. Amen, Denise K. Burns ©2021. J. B. Lippincott, Williams and Wilkins.

Recommended Materials:

Recommended Textbooks

1. Foundations of Osteopathic Medicine, Fourth Edition, Michael Seffinger, D.O. (Editor) ©2019. Lippincott, Williams and Wilkins.

Journal Articles and Readings

May be assigned as appropriate.

Recommended Supplies

1. Osteopathic treatment table

VI. Assignments

Additional readings may be added at any point in the course.

VII. Grading Criteria

Examination and Grading Policy

This course adheres to the examination and grading policy as stated in the KPCOM Student Handbook.

Written examinations administered on campus will be administered electronically via student-owned iPads® unless stated otherwise. Students are required to arrive with their iPads® appropriately configured to take the exam. Students arriving without their iPads® will be assigned an unexcused absence and will not be allowed to sit for the examination at that time.

Written examinations administered off campus will be administered electronically via student-owned computers that meet minimum requirements for the program, unless stated otherwise. Students are expected to maintain their computers appropriately configured to take the exam. It is the students' responsibility to ensure functionality (hardware, wireless network access, battery charge, etc.) prior to each assessment. Students should contact ExamSoft at support@examsoft.com or 1-866-429-8889 for issues and technical support.

This is a letter graded course; the passing grade is C. Course grades will be determined using the following table:

GRADING SCALE		
GRADE	QUALITY POINTS	SCORE
A	4.00	95 – 100
A-	3.75	90 – 94
B+	3.50	87 – 89
B	3.00	83 – 86
B-	2.75	80 – 82
C+	2.50	75 – 79
C	2.00	70 -74
F	0.00	FAIL

1. In addition, each student must score an average grade on the practical examinations of 70% (with no grade below 60%) in order to pass this course. If the average practical grade is less than 70%, the student will fail the course and be assigned a final grade equal to his/her average practical exam score. If a student receives a score below a 60% on either practical exam, the student will also fail the course and be assigned a final grade equal to the grade of the lowest practical exam. The student will be required (if eligible), to remediate the practical portion of the course during the scheduled remediation period.
2. In addition, an average grade of 70% on the written exams is necessary to pass the course. If the average written grade is less than 70%, the student will fail the course and be assigned a final grade equal to his/her average written exam score. The student will be required (if eligible), to remediate the written portion of the course during the scheduled remediation period.

Exam	Date	Testable Material Date Range
OPP I Midterm Written	10/8/21	8/12/21-9/30/21
OPP I Midterm Practical	10/8/21	8/12/21-9/30/21
OPP I Final Written	12/3/21	10/14/21-11/23/21
OPP I Final Practical	12/3/21	10/14/21-11/23/21

3. See also #6 under Practical Training Session Information. If a student has four or more unexcused absences in the semester, the student will fail the course and be assigned a final grade of F. The student will be required (if eligible) to remediate the practical portion of the course during the scheduled remediation period.
4. On the written exams (midterm and final), 5 (five) questions will be asked for each OPP lecture given. In addition, there will be questions on the final written exam on comprehensive topics from testable material from the midterm examination. The two written examinations will be worth 60% of the overall course grade. The two practical examinations will be worth 40% of the overall course grade.
5. Two practical exams (midterm/final) will be given and will be worth 48 points each.
6. All practical examinations will be tightly timed. Students will be assigned to groups for each practical exam and will be expected to report to the examination area and be signed-in 15 minutes prior to the beginning of the examination for their group. If a student appears between 10 and 5 minutes prior to the start of the examination, he/she will lose 5 points from his/her practical grade. If he/she appears within 5 minutes prior to the exam, he/she will lose 10 points from his/her practical grade and will be required to wait until the end of the day to take the exam.

Unexcused absence, being removed from the practical, or violation of the dress code policy will result in a three station make-up practical examination and a maximum of a 70% score, while an excused absence will result in a three station make-up examination with no point loss, with the examination in both cases given within 10 business days at a time set by the department.

The Office of Student Affairs considers the following to be excused absences for a practical exam:

1. Death and funeral in the immediate family (spouse, partner, parent, grandparent, in-law, sibling, child, aunt, uncle, niece, nephew)
2. Personal illness, only when diagnosed and documented in writing by the physician who evaluated and treated the student at the time of the absence.
3. University sanctioned travel or function, documented no less than two weeks in advance by the office of Student Services. The office of Student Services will be responsible for assuring that the course directors receive the appropriate documentation.
4. Other extenuating circumstances which must be approved by the course directors, with the appropriate documentation for the reason.

** ALL excused absence documentation must be approved by the Office of Student Affairs.

7. Student doctors may lose points for absences, tardiness, lack of professionalism, or lack of proper attire/hygiene (as described in the Practical Training Session section of this syllabus).

VIII. Course Policies

Challenges

Refer to the policy on Exam Question Challenges.

Make-up Examination / Re-examination / Remediation

Refer to KPCOM Student Handbook for further information on the make-up and remediation exam policies.

Make-up Examination

Students are expected to take all examinations at their originally scheduled times, except when on an approved leave of absence.

When an examination is missed, it is the responsibility of the student to contact the Office of Student and Alumni Affairs by emailing kpcomstudentaffairs@nova.edu and the course director within 24 hours of the missed examination. The student must supply the Office of Student and Alumni Affairs with written documentation for the reason the examination was missed.

The Office of Student and Alumni Affairs will contact the student and the Office of Preclinical Education who will notify the appropriate course director(s) involved as to whether the absence is excused or unexcused.

The following are considered excused absences for examinations:

1. Death and funeral in the immediate family (spouse, partner, parent, grandparent, in-law, sibling, child, aunt, uncle, niece, nephew).
2. Personal illness, only when diagnosed and documented in writing by the physician who evaluated and treated the student at the time of the absence.
3. University sanctioned travel or function documented no less than two weeks in advance by the Office of Student and Alumni Affairs. The Office of Student and Alumni Affairs will be responsible for assuring that the course directors receive the appropriate documentation.
4. Other extenuating circumstances, which must be approved by the Office of Student and Alumni Affairs, with the appropriate documentation for the reason.

** ALL excused absence documentation must be approved by the Office of Student and Alumni Affairs.

Students with an excused absence will be offered a makeup examination and will receive their earned grades. Students with an unexcused absence will be offered a makeup examination and will receive a maximum grade of 70% on that examination. Students will be notified by the

Office of Pre-Clinical Education of the time, date, and location. Eligible students are to make themselves available at the scheduled date and time of the make-up examination. Students who miss a make-up examination will receive a grade of zero for the examination.

Refer to Attendance section of syllabus for details.

Written Make-up exams:

The written Make-up exam will be scheduled for a date and time determined by the Office of Pre-Clinical Education. Eligible students are to make themselves available at the scheduled date and time of the Make-up examination.

Practical Make-up Exams:

All make-up exams for OPP practical examinations will be given as a three-station examination covering the same material as the missed examination. See additional information above regarding excused and unexcused absences for practical examinations.

Re-examination

This course does not offer re-examination.

Remediation Examination

If all other criteria required for passing this course have been met and the student is eligible, the student who failed this course due to not attaining minimum requirements for the written examinations as described in #3 of the Examination and Grading Policy (above) will be offered a written remediation examination, scheduled according to policy and procedures set in the current KPCOM Student Handbook. The format for this exam is described in the paragraph below.

If all other criteria required for passing this course have been met and the student is eligible, the student who failed this course due to not attaining minimum requirements for the practical examinations as described in #2 of the Examination and Grading Policy (above) will be offered a practical remediation examination, scheduled according to policy and procedures set in the current COM Student Handbook. The format for this exam is described in the paragraph below.

All remediation's for OPP written examinations may be conducted in a multiple choice or essay/short-answer format. Students may be asked one general essay question or a series of 2 to 5 short answer essay questions or 5 multiple-choice questions per lecture for each lecture tested on the examination.

All remediation's for OPP practical examinations exam will be given as a six-station examination and the student will receive a maximum score of 70% score.

The maximum attainable course grade after successful remediation is C(E). The remediation for both the written and practical examinations will be given during the remediation period determined by the KPCOM. Students will be notified by the Office of Pre-Clinical Education of the time,

date, and location. Students are to make themselves available at the scheduled time and date of the remediation examination. Students who miss a remediation examination will not be offered a makeup examination and will receive a grade of zero for the examination.

Attendance

Attendance will be mandatory for all practical training sessions in the course. Lecture attendance is highly encouraged; however, it is not mandatory.

See the Practical Training Session Section of this syllabus for specifics on practical training session attendance.

Course & Instructor Evaluation

Evaluation by the students of the course and instructors shall be carried out at the end of the course. The results will be presented to the Academic Curriculum Committee for discussion.

IX. Course Schedule

Course Schedule:

Name	Location	Date	Start Time	End Time	Instructor
1. Lecture - Course Introduction	FTL – Steele Auditorium TBR – Room 1801	8/12/21	10:10 AM	11:00 AM	Qureshi, Yasmin (FTL)
2. Lecture - History of Osteopathic Medicine	FTL – Steele Auditorium TBR – Room 1801	8/12/21	11:10 AM	12:00 PM	Mehra, Rohit (TBR)
Practical Training Session Group 1 - Art of Palpation	FTL – Taft South Court TBR – OPP Lab	8/12/21	1:00 PM	2:30 PM	Mehra, Rohit (TBR)
Practical Training Session Group 2 - Art of Palpation	FTL – Taft South Court TBR – OPP Lab	8/12/21	2:40 PM	4:10 PM	Mehra, Rohit (TBR)
Practical Training Session Group 3 - Art of Palpation	FTL – Taft South Court TBR – OPP Lab	8/12/21	4:20 PM	5:50 PM	Mehra, Rohit (TBR)
3. Lecture - Philosophy of Osteopathic Medicine	FTL – Steele Auditorium TBR – Room 1801	8/19/21	8:10 AM	9:00 AM	Waters, Holly (TBR)
4. Lecture - Posture	FTL – Steele Auditorium TBR – Room 1801	8/26/21	8:10 AM	9:00 AM	Qureshi, Yasmin (FTL)
Practical Training Session Group 1 - Bony Landmarks I & Posture	FTL – Taft South Court TBR – OPP Lab	8/26/21	1:00 PM	2:30 PM	Issac, Lailah Qureshi, Yasmin (FTL)
Practical Training Session Group 2 - Bony Landmarks I & Posture	FTL – Taft South Court TBR – OPP Lab	8/26/21	2:40 PM	4:10 PM	Issac, Lailah Qureshi, Yasmin (FTL)
Practical Training Session Group 3 - Bony Landmarks I & Posture	FTL – Taft South Court TBR – OPP Lab	8/26/21	4:20 PM	5:50 PM	Issac, Lailah Qureshi, Yasmin (FTL)

5. Lecture - Osteopathic Concepts - Function and Dysfunction	FTL – Steele Auditorium TBR – Room 1801	8/30/21	11:10 AM	12:00 PM	Mehra, Rohit (TBR)
Practical Training Session Group 1 – Bony Landmarks II	FTL – Taft South Court TBR – OPP Lab	8/30/21	1:00 PM	2:30 PM	Issac, Lailah (FTL)
Practical Training Session Group 2 - Bony Landmarks II	FTL – Taft South Court TBR – OPP Lab	8/30/21	2:40 PM	4:10 PM	Issac, Lailah (FTL)
Practical Training Session Group 3 - Bony Landmarks II	FTL – Taft South Court TBR – OPP Lab	8/30/21	4:20 PM	5:50 PM	Issac, Lailah (FTL)
6. Lecture – Indications & Contraindications in Usage of OMT	FTL – Steele Auditorium TBR – Room 1801 FTL – Steele Auditorium TBR – Room 1801	9/7/21	9:10 AM	10:00 AM	Waters, Holly (TBR)
Practical Training Session Group 1 – Range of Motion	FTL – Taft South Court TBR – OPP Lab	9/9/21	1:00 PM	2:30 PM	Joseph, Roody (FTL)
Practical Training Session Group 2 – Range of Motion	FTL – Taft South Court TBR – OPP Lab	9/9/21	2:40 PM	4:10 PM	Joseph, Roody (FTL)
Practical Training Session Group 3 – Range of Motion	FTL – Taft South Court TBR – OPP Lab	9/9/21	4:20 PM	5:50 PM	Joseph, Roody (FTL)
7. Lecture - Lymph I	FTL – Steele Auditorium TBR – Room 1801	9/14/21	8:10 AM	9:00 AM	Mehra, Rohit (TBR)
Practical Training Session Group 1 – Lymph I Treatment - Thorax and Abdomen	FTL – Taft South Court TBR – OPP Lab	9/16/21	1:00 PM	2:30 PM	Mehra, Rohit (TBR)
Practical Training Session Group 2 - Lymph I Treatment - Thorax and Abdomen	FTL – Taft South Court TBR – OPP Lab	9/16/21	2:40 PM	4:10 PM	Mehra, Rohit (TBR)
Practical Training Session Group 3 - Lymph I Treatment - Thorax and Abdomen	FTL – Taft South Court TBR – OPP Lab	9/16/21	4:20 PM	5:50 PM	Mehra, Rohit (TBR)
8. Lecture - Lymph II	FTL – Steele Auditorium TBR – Room 1801	9/21/21	8:10 AM	9:00 AM	Barry, Patrick (FTL)
9. Lecture - Direct Techniques	FTL – Steele Auditorium TBR – Room 1801	9/21/21	9:10 AM	10:00 AM	Qureshi, Yasmin (FTL)

Practical Training Session Group 1 - Lymph II Treatment - Extremities, Head and Neck	FTL – Taft South Court TBR – OPP Lab	9/23/21	1:00 PM	2:30 PM	Barry, Patrick (FTL)
Practical Training Session Group 2 - Lymph II Treatment - Extremities, Head and Neck	FTL – Taft South Court TBR – OPP Lab	9/23/21	2:40 PM	4:10 PM	Barry, Patrick (FTL)
Practical Training Session Group 3 - Lymph II Treatment - Extremities, Head and Neck	FTL – Taft South Court TBR – OPP Lab	9/23/21	4:20 PM	5:50 PM	Barry, Patrick (FTL)
10. Lecture – Indirect Techniques	FTL – Steele Auditorium TBR – Room 1801	9/28/21	8:10 AM	9:00 AM	Barry, Patrick (FTL)
Practical Training Session Group 1 - Soft Tissue Techniques: Head, Cervical and Extremities	FTL – Taft South Court TBR – OPP Lab	9/30/21	1:00 PM	2:30 PM	Qureshi, Yasmin (FTL)
Practical Training Session Group 2 - Soft Tissue Techniques: Head, Cervical and Extremities	FTL – Taft South Court TBR – OPP Lab	9/30/21	2:40 PM	4:10 PM	Qureshi, Yasmin (FTL)
Practical Training Session Group 3 - Soft Tissue Techniques: Head, Cervical and Extremities	FTL – Taft South Court TBR – OPP Lab	9/30/21	4:20 PM	5:50 PM	Qureshi, Yasmin (FTL)
Midterm Written Examination	FTL – Steele and Morris Auditorium TBR – Rooms 1701, 1801, and 1803	10/8/21	8:00 AM	10:00 AM	
Midterm Practical Examination	FTL – Taft South Court TBR – OPP Lab	10/8/21	10:30 AM	6:00 PM	
11. Lecture – Osteopathic Models of Treatment	FTL – Steele Auditorium TBR – Room 1801	10/14/21	11:10 AM	12:00 PM	Waters, Holly (TBR)
Practical Training Session Group 1 - Soft Tissue Techniques – Pelvis, Lumbar, Thorax	FTL – Taft South Court TBR – OPP Lab	10/14/21	1:00 PPM	2:30 PM	Waters, Holly (TBR)
Practical Training Session Group 2 - Soft Tissue Techniques – Pelvis, Lumbar, Thorax	FTL – Taft South Court TBR – OPP Lab	10/14/21	2:40 PM	4:10 PM	Waters, Holly (TBR)
Practical Training Session Group 3 - Soft Tissue Techniques – Pelvis, Lumbar, Thorax	FTL – Taft South Court TBR – OPP Lab	10/14/21	4:20 PM	5:50 PM	Waters, Holly (TBR)
12. Lecture - Pelvis I	FTL – Steele Auditorium TBR – Room 1801	10/19/21	8:10 AM	9:00 AM	Widboom, Nathan (FTL)

Practical Training Session Group 1 – Pelvis I	FTL – Taft South Court TBR – OPP Lab	10/21/21	1:00 PM	2:30 PM	Widboom, Nathan (FTL)
Practical Training Session Group 2 – Pelvis I	FTL – Taft South Court TBR – OPP Lab	10/21/21	2:40 PM	4:10 PM	Widboom, Nathan (FTL)
Practical Training Session Group 3 - Pelvis I	FTL – Taft South Court TBR – OPP Lab	10/21/21	4:20 PM	5:50 PM	Widboom, Nathan (FTL)
13. Lecture – Pelvis II	FTL – Steele Auditorium TBR – Room 1801	10/26/21	8:10 AM	9:00 AM	Widboom, Nathan (FTL)
Practical Training Session Group 1 - Pelvis II	FTL – Taft South Court TBR – OPP Lab	10/28/21	1:00 PM	2:30 PM	Widboom, Nathan (FTL)
Practical Training Session Group 2 - Pelvis II	FTL – Taft South Court TBR – OPP Lab	10/28/21	2:40 PM	4:10 PM	Widboom, Nathan (FTL)
Practical Training Session Group3 - Pelvis II	FTL – Taft South Court TBR – OPP Lab	10/28/21	4:20 PM	5:50 PM	Widboom, Nathan (FTL)
14. Lecture - Sacrum I	FTL – Steele Auditorium TBR – Room 1801	11/2/21	8:10 AM	9:00 AM	Sandhouse, Mark (FTL)
Practical Training Session Group 1 – Sacrum I	FTL – Taft South Court TBR – OPP Lab	11/4/21	1:00 PM	2:30 PM	Sandhouse, Mark (FTL)
Practical Training Session Group 2 – Sacrum I	FTL – Taft South Court TBR – OPP Lab	11/4/21	2:40 PM	4:10 PM	Sandhouse, Mark (FTL)
Practical Training Session Group 3 – Sacrum I	FTL – Taft South Court TBR – OPP Lab	11/4/21	4:20 PM	5:50 PM	Sandhouse, Mark (FTL)
15. Lecture - Sacrum II	FTL – Steele Auditorium TBR – Room 1801	11/9/21	8:10 AM	9:00 AM	Sandhouse, Mark (FTL)
16. Lecture - Piriformis Syndrome	FTL – Steele Auditorium TBR – Room 1801	11/9/21	9:10 AM	10:00 AM	Qureshi, Yasmin (FTL)
Practical Training Session Group 1 – Sacrum II	FTL – Taft South Court TBR – OPP Lab	11/10/21	1:00 PM	2:30 PM	Sandhouse, Mark (FTL)
Practical Training Session Group 2 – Sacrum II	FTL – Taft South Court TBR – OPP Lab	11/10/21	2:40 PM	4:10 PM	Sandhouse, Mark (FTL)
Practical Training Session Group 3 – Sacrum II	FTL – Taft South Court TBR – OPP Lab	11/10/21	4:20 PM	5:50 PM	Sandhouse, Mark (FTL)

Practical Training Session Group 1 – Sacrum III	FTL – Taft South Court TBR – OPP Lab	11/11/21	1:00 PM	2:30 PM	Sandhouse, Mark (FTL)
Practical Training Session Group 2 – Sacrum III	FTL – Taft South Court TBR – OPP Lab	11/11/21	2:40 PM	4:10 PM	Sandhouse, Mark (FTL)
Practical Training Session Group 3 – Sacrum III	FTL – Taft South Court TBR – OPP Lab	11/11/21	4:20 PM	5:50 PM	Sandhouse, Mark (FTL)
17. Lecture - Psoas Syndrome	FTL – Steele Auditorium TBR – Room 1801	11/16/21	8:10 AM	9:00 AM	Waters, Holly (TBR)
18. Lecture - The Facilitated Segment	FTL – Steele Auditorium TBR – Room 1801	11/18/21	10:10 AM	11:00 AM	Mehra, Rohit (TBR)
19. Lecture - Chapman's Reflexes	FTL – Steele Auditorium TBR – Room 1801	11/18/21	11:10 AM	12:00 PM	Barry, Patrick (FTL)
Practical Training Session Group 1 – Piriformis/Psoas Syndrome	FTL – Taft South Court TBR – OPP Lab	11/18/21	1:00 PM	2:30 PM	Qureshi, Yasmin (FTL)
Practical Training Session Group 2 – Piriformis/Psoas Syndrome	FTL – Taft South Court TBR – OPP Lab	11/18/21	2:40 PM	4:10 PM	Qureshi, Yasmin (FTL)
Practical Training Session Group 3 – Piriformis/Psoas Syndrome	FTL – Taft South Court TBR – OPP Lab	11/18/21	4:20 PM	5:50 PM	Qureshi, Yasmin (FTL)
Practical Training Session Group 1 – Viscerosomatics, Autonomics & Chapman's Points	FTL – Taft South Court TBR – OPP Lab	11/23/21	1:00 PM	2:30 PM	Barry, Patrick (FTL)
Practical Training Session Group 2 – Viscerosomatics, Autonomics & Chapman's Points	FTL – Taft South Court TBR – OPP Lab	11/23/21	2:40 PM	4:10 PM	Barry, Patrick (FTL)
Practical Training Session Group 3 – Viscerosomatics, Autonomics & Chapman's Points	FTL – Taft South Court TBR – OPP Lab	11/23/21	4:20 PM	5:50 PM	Barry, Patrick (FTL)
Final Written Examination	FTL – Steele and Morris Auditorium TBR – Rooms 1701, 1801, and 1803	12/3/21	8:00 AM	10:00 AM	
Final Practical Examination	FTL – Taft TBR – OPP Lab	12/3/21	10:30 AM	6:00 PM	

Lecture Objectives:

1,2. Course Introduction (Qureshi), History of Osteopathic Medicine (Mehra)

DiGiovanna - Chapter 1,2

1. describe the medical system of practice at the time of A.T. Still

2. discuss the factors influencing A.T. Still in his development of osteopathy
3. state the important factors and dates in the development of the osteopathic profession from its conception until the present time
4. discuss the evolution of the osteopathic profession in the 20th and into the 21st century

Practical Training Session – Art of Palpation (Mehra)

1. palpate different body structures, and differentiate them via palpation (LAB)
2. begin to develop palpatory skills necessary for evaluation and treatment of the body (LAB)

3. Philosophy of Osteopathic Medicine (Waters)

DiGiovanna Chapter 3

1. describe the basic philosophical tenets of osteopathic medicine
2. be able to give examples of each of the osteopathic principles
3. describe how the osteopathic philosophy is incorporated into medical practice
4. define spatial orientation using the terms anterior, posterior, superior, inferior, medial, lateral
5. define a plane and define coronal, sagittal, and transverse planes

4. Posture (Qureshi)

DiGiovanna Chapter 7 (Posture), 4 (Somatic Dysfunction)

1. define the planes and axes of motion of the body
2. define directional descriptors
3. describe ideal standing posture
4. describe physiologic curves in the sagittal plane
5. describe the relationships between a vertical plumb line and body positioning in ideal posture, relaxed posture and military posture
6. describe ideal sleeping position
7. describe ideal seated posture
8. define accommodation, compensation and decompensation
9. list factors that produce decompensation to ideal posture

Practical Training Session - Bony Landmarks I, II and Posture (Issac & Qureshi)

1. demonstrate the ability to find selected landmarks on both a skeleton and a student partner (**LAB**)
2. assess posture and postural differences in various anatomic planes (**LAB**)
3. evaluate symmetry/asymmetry of the body using various observation techniques (**LAB**)

5. Osteopathic Concepts - Function and Dysfunction (Mehra)

DiGiovanna Chapter 4

1. define the term “somatic dysfunction”.
2. identify causes of somatic dysfunction.
3. understand the criteria to diagnose somatic dysfunctions.
4. understand how vertebral rotation is named.
5. define and understand both active and passive motion.
6. understand and be able to differentiate the types of motion barriers that exist.
7. define “Osteopathic Manipulative Treatment” and “Osteopathic Manipulative Medicine”.
8. explain the difference between direct and indirect osteopathic treatment.

6. Indications/Contradictions in the Usage of OMT (Waters)

DiGiovanna Chapter 11

1. list the indications for the utilization of OMT by treatment modality
2. list the different aspects of manipulative treatment
3. differentiate absolute versus relative contraindications by treatment modality
4. list any special considerations for OMT based on treatment modality

Practical Training Session - Range of Motion (Joseph)

1. assess active and passive motion in the cervical, thoracic and lumbar spines, upper and lower extremities **(LAB)**

7. Lymph I (Mehra)

DiGiovanna Chapter 107

1. explain the functions of the lymphatic system
2. explain what lymph fluid consists of and lymph content
3. understand the anatomy of the lymph system
4. understand the role of the respiratory diaphragm in lymph flow
5. understand the drainage into the thoracic duct and the right lymphatic duct
6. discuss causes of lymph flow disturbance
7. understand the location of various lymph nodes in the body

Practical Training Session - Lymph I, Palpation of Nodes and Organized Lymph Tissue, Treatment - Thorax and Abdomen (Mehra)

1. demonstrate selected techniques for lymphatic treatment in the thorax and abdomen **(LAB)**

8. Lymph II (Barry)

DiGiovanna Chapter 107

1. understand the forces that contribute to lymph flow movement
2. list the areas of lymphatic drainage to the thoracic duct and right lymphatic duct
3. understand diaphragm anatomy and diaphragm motions with inhalation/exhalation
4. define edema and list the stages of lymphedema
5. know the pitting edema scale

6. understand the mechanical conditions that decrease lymph flow
7. define a lymphatic technique and the 2 types of lymph techniques
8. know the contraindications to lymphatic techniques
9. list the proper sequence of lymphatic treatment techniques

9. Direct Techniques (Qureshi)

DiGiovanna Chapter 11, 12, 13, 17

1. describe the concepts of direct treatment techniques
2. discuss the sequence of applying any treatment techniques
3. discuss the basis of direct soft tissue techniques
4. discuss the background of muscle energy techniques
5. define muscle energy techniques as direct techniques
6. discuss the basic principles of muscle energy techniques
7. list the sequence of applying muscle energy techniques
8. discuss the underlying neurophysiologic principles of muscle energy techniques.
9. describe the principles of high velocity low amplitude (HVLA) techniques.
10. define HVLA techniques as direct techniques.
11. describe the basic principles of HVLA techniques.
12. list the sequence of applying HVLA techniques.
13. discuss the underlying neurophysiologic principles of HVLA techniques.

Practical Training Session - Lymph II Treatment - Extremities, Head & Neck (Barry)

1. demonstrate the proper order for treatment of the lymphatic system **(LAB)**
2. demonstrate selected techniques for lymphatic treatment of the abdomen, pelvis, head, neck and extremities **(LAB)**

10. Indirect Techniques (Barry)

DiGiovanna Chapter 11, 12, 14, 15, 18

1. describe the concepts of indirect treatment techniques
2. list the indications and contraindications for each indirect technique discussed
3. list the sequence of applying myofascial treatment techniques
4. Describe proposed mechanisms for selected indirect techniques
5. Recognize the historical context of strain/counterstrain techniques
6. list the sequence of applying strain/counterstrain techniques
7. describe the concept of a counterstrain tender point
8. Recognize the underlying neuro-physiological principles of strain/counterstrain and facilitated positional release

Practical Training Session - Soft Tissue Techniques: Neck, Extremities (Qureshi)

1. be able to perform traction, soft tissue stretching, direct/indirect myofascial release technique, muscle energy, deep pressure release, and indirect regional technique for the neck and extremities **(LAB)**

Practical Training Session - Soft Tissue Techniques: Pelvis, Lumbar, Thorax (Waters)

1. be able to perform soft tissue stretch and myofascial release techniques for the pelvis, lumbar and thoracic regions **(LAB)**

11. Pelvis I (Widboom)

DiGiovanna Chapter 57, 59

1. discuss the muscular attachments of the pelvis and how they affect movement
2. list the ligaments attached to the pelvis
3. explain dysfunctions related to the pelvis
4. list pelvic landmarks
5. understand and describe gender differences between male vs. female pelvis

Practical Training Session - Pelvis I Diagnosis (Widboom)

1. recognize and palpate pelvic bony landmarks (LAB)
2. perform and interpret selective tests of the pelvis used in the diagnosis of pelvic somatic dysfunctions (LAB)

12. Pelvis II (Widboom)

DiGiovanna Chapter 57, 59

1. describe how to perform special tests of the pelvis (e.g. standing flexion test, ASIS compression test)
2. explain the necessary findings in the diagnosis of: a. shears; b. flares; c. rotations
3. describe the muscle energy treatments for each of the above dysfunctions and muscles involved
4. diagnose innominate somatic dysfunctions
5. review basic principles of muscle energy technique

Practical Training Session - Pelvis II Treatment - Muscle Energy (Widboom)

1. treat innominate and pubic somatic dysfunctions using muscle energy technique **(LAB)**

13. Sacrum I (Sandhouse)

DiGiovanna Chapter 57, 60

1. list the embryological, gross, ligamentous, facial, neurological and muscular anatomy associated with the sacrum
2. describe the anatomy of the sacroiliac joint
3. discuss the concept of axes as related to the sacrum and the motions of the bones around these axes
4. describe the respiratory motion of the sacrum
5. describe static and dynamic testing of the sacrum for somatic dysfunction

Practical Training Session - Sacrum I - Diagnosis of Sacrum (Sandhouse)

1. perform static and dynamic testing of the sacrum for somatic dysfunction **(LAB)**

14. Sacrum II (Sandhouse)

DiGiovanna Chapter 60, 61, 68

1. describe the following tests of the sacrum:
 - a. seating flexion test
 - b. backwards bending test;
 - c. lumbosacral spring test
2. describe the criteria for the diagnosis of the following disorders:
 - a. bilateral flexion
 - b. bilateral extension
 - c. forward sacral torsions
 - d. backwards sacral torsions
 - e. unilateral extensions
 - f. unilateral flexions
3. describe the axes involved in the above disorders
4. describe the relationship of L5 to sacral torsions

15. Piriformis Syndrome (Qureshi)

DiGiovanna Chapter 68, 91, 92

1. describe the basic etiology of Piriformis syndrome.
2. describe the common symptom profile of a patient with Piriformis syndrome.
3. describe the mechanism of symptom development in Piriformis syndrome
4. explain the differential diagnosis of sciatic pain.
5. show the diagnostic work-up of Piriformis syndrome.
6. show the treatment protocol for Piriformis syndrome.

Practical Training Session - Sacrum II Treatment - Muscle Energy: Bilateral Dysfunctions, Forward Torsions (Sandhouse)

1. assess for sacral somatic dysfunctions and demonstrate treatment for sacral dysfunctions presented in Practical Training Session, including torsions and bilateral sacral flexions **(LAB)**
2. assess for sacral somatic dysfunctions and demonstrate treatment for sacral dysfunctions presented in Practical Training Session, including bilateral sacral dysfunctions and forward sacral torsions **(LAB)**

Practical Training Session – Sacrum III (Sandhouse)

1. interpret the data for all sacral somatic dysfunctions, and understand each special test for the sacrum, and how to use those to diagnose all sacral dysfunctions **(LAB)**
2. assess for sacral somatic dysfunctions and demonstrate treatment for sacral dysfunctions presented in Practical Training session, including backward sacral torsions and unilateral sacral dysfunctions **(LAB)**

16. Psoas Syndrome (Waters)

DiGiovanna Chapters 68,91,92

1. discuss the causes of psoas spasm and syndrome.

2. describe the anatomy of the psoas major, iliacus, and the piriformis muscles, including their origin and insertion, function and innervation.
 3. discuss the clinical presentation of the patient with psoas syndrome.
- discuss the progression of the syndrome and relate each step to somatic dysfunctions and symptoms.

17. The Facilitated Segment (Mehra)

DiGiovanna Chapter 6

1. be able to define facilitation.
2. understand the relationship between facilitation and somatic dysfunction.
3. understand the relationship between the autonomic nervous system and facilitation.
4. define a viscerosomatic reflex and a somato-visceral reflex.
5. be able to identify the segmental reflex levels for each specific visceral organ.

18. Chapman's Reflexes (Barry)

DiGiovanna Chapter 22

1. be able to list the characteristics of a Chapman's reflex point.
2. be able to identify the location of the anterior and selected posterior Chapman's reflex points for each specific visceral organ.
3. be able to identify the locations of the three sympathetic collateral ganglia, and which organs each one innervates

Practical Training Session- Psoas/Piriformis Diagnosis and Treatment (Qureshi)

1. assess for psoas hypertonicity and demonstrate treatment for psoas hypertonicity by muscle energy and counterstrain techniques **(LAB)**
2. assess for piriformis hypertonicity and demonstrate treatment for piriformis hypertonicity by muscle energy and counterstrain techniques **(LAB)**

Practical Training Session - Viscerosomatic Reflexes/Autonomic Techniques and Chapman's Reflexes (Mehra)

1. be able to palpate and assess for viscerosomatic reflexes **(LAB)**
2. perform the autonomic nervous system osteopathic techniques for the body, and know which portion of the autonomic nervous system each technique affects **(LAB)**
3. locate and identify the anterior Chapman's reflex points that correlate with visceral dysfunction **(LAB)**