

OST 595: Modern Applications of Osteopathic Science

Spring 2025, 2/6/25 – 4/17/25

Table of Contents

[Faculty & Staff Information](#)

[Course Director Biosketch\(es\)](#)

[Contributing Faculty](#)

[Curriculum Assistants \(CAs\)](#)

[Who to Contact with Questions](#)

[Course Information](#)

[Course Description & Overview](#)

[Course Objectives](#)

[Textbooks and Resources](#)

[Grading Schema](#)

[Grading Requirements](#)

[Required Component 1](#)

[Required Component 2](#)

[Required Component 3](#)

[Policies & Resources](#)

[Academic Support Resources at MSUCOM](#)


[College or University Policies with Which Enrolled Students Must Be Familiar](#)

[Student Feedback](#)

[Course Schedule and Changes to Schedule or Requirements](#)

[Addendum: Course Schedule](#)

Faculty & Staff Information

Contact Information	Biosketch
 <p>Chris Pohlod, D.O. Pohlodch@msu.edu 517-353-9110 Primary Site: EL Office Hours: Friday Afternoon & is available by email request.</p>	<p>Dr Pohlod is a Board-Certified Pediatrician who left general practice around 2013 to pursue a special interest in Pediatric Osteopathic Manipulative Medicine and Integrative Medicine. Out of his interest in supporting families pre- during and post- divorce, he also has a special interest in trauma and resilience. He founded a small faith-based non-profit centered around bringing the disciplines of modern biblical scholarship and wellness science together to maximize healing for children and families. Teaching students critical thinking, Osteopathic Science and Philosophy is a passion of his. He has been married for 26 years and has two daughters.</p>

Contributing Faculty

Name	Email	Phone	Location
Mari Douma, D.O.	douma@msu.edu	517-355-1855	EL
Matt Zatkin, DO, M.S.	zatkinma@msu.edu	517-353-9110	EL
Raquel Richie, PhD*	ritchie@msu.edu	586-263-6296	MUC
Carolina Restini, PharmD, PhD*	restinic@msu.edu	517-353-7145	DMC & MUC
Terri Hammer, DO * Site Course Coordinator	hammert@msu.edu	313-505- 5909	MUC

Curriculum Assistants (CAs)

Name	Email	Phone	Location
Beata Rodriguez	rodri583@msu.edu	1-586-263- 6799	MUC

Who to Contact with Questions

Question, Need, or Topic	Contact Person
Course - Logistics & Details	Contact CA or CD for rooms, groups, materials, links, schedule, etc.
Course - Overall	Contact Course Directors (in bold above).
Course - Specific Content	Contact Contributing Faculty for the content (see schedule).
Absences	Contact Course Directors (in bold above).
Behavior	Submit exemplary or concerning behavior to the CGPI .
Enrollment	Inquire with MSUCOM Registrar .
Personal/Wellness Needs	Inquire with Wellness & Counseling .
Study Skills or Progression	Inquire with Academic & Career Advising .
Technical Support	Inquire with MSU IT Service Desk . Indicate COM affiliation.

Course Information

Course Description & Overview

OST 595 is an elective course in the D.O. program. It is a 1-credit hour course that provides students with an opportunity to consider aspects of Osteopathic care that are separate from Osteopathic Manipulation. This will help Osteopathic medical students form a category for their distinctive place in healthcare. Osteopathic Science is the body of clinical research that supports the tenets of Osteopathy. It focuses specifically on mechanisms of self-healing in the physical, emotional, mental, and spiritual realms of health.

Course Objectives

1. Course participant will define the discipline of Osteopathic Science
 - a. Course participant will know the Tenets of Osteopathy and how they relate to forming a scientific discipline and critical thinking.
2. Course participant will review examples of science-based healing interventions that do not include drugs or surgery and heal with the Tenets of Osteopathy.

These examples include:

- a. Course intro. GM Patient Question.
- b. Critical Thinking (Restini)
- c. Primer on GM Foods
- d. Science behind gut microbiome (Matt Zatkin)
- e. Genetically Modified Salmon Project Presentations (Group)

- f. Diet Topic (Mari Douma)
- g. Science of Yoga (Grimshaw)
- h. Epigenetics and Environment (Hammer)
- i. Vegetotherapy (Travis Gordon)

The American Osteopathic Association has identified core competencies essential for future practice as an osteopathic physician. These are embedded throughout our programmatic and course objectives. By the end of this course, learners should be able to:

Competency	Related Course Objective(s)
Interpersonal & Communication Skills	1. The point of the mock debate format is to promote collaboration and presentation which help practice interpersonal skills and communication.
Interprofessional Education for Collaborative Practice	2. The presentation topics can vary widely, and part of the class is seeing the connections possible between different disciplines and patient care.
Medical Knowledge	3. Each session will hit upon aspects of medical knowledge.
Osteopathic Principles, Practice, & OMM	4. In Session 1 We will define Osteopathic Science and apply it throughout the course sessions.
Practice-Based Learning and Improvement	5. The use of the mock debate helps us deconstruct the process to answer critically and sensitively real world questions patients may ask.
Professionalism & Leadership	6. As we critically evaluate topics, this will be with the utmost respect for those who hold positions on all possible sides of a concept.
Scientific Method & Literacy	7. Session 2: Reading Medical Literature and the mock debate give practice to this competency.
Self-Directed & Lifelong Learning	8. We tackle current events in a critical way applying Osteopathic Science Principles. This can help set up a pattern for life-long learning.
Societal & Cultural Awareness & Advocacy	9. A theme throughout the class is how implicit bias toward expensive interventions and medications impact healthcare.
Systems-Based Practice	10. The presentations topics can vary widely, and part of the class is seeing the connections possible between different disciplines and patient care.

Textbooks and Resources

Status	Resource
Required	None

Optional	None
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Grading Schema

Elective Grades

Course scores will be determined using the following formula:

$$\frac{(\text{Final Exam} + \text{mock debate} + \text{form with suggested topics})}{(30)} \times 100\% = \text{Final Percent Score}$$

Course grades will then be assigned based on those course scores as follows:

- **P or Pass** - Satisfactory performance has been achieved and credit will be granted if a student's final percent score is 100% (Each item turned in will receive full points)
- **N or No Grade** - Satisfactory performance has not been achieved and credit will not be granted if a student's final percent score is below 100% or is incomplete. (The only way to fail is to not show up and not complete the simple tasks)

Remediation is not offered for elective courses.

Grading Requirements

The MSUCOM D.O. degree program incorporates both horizontal and vertical curriculum integration, meaning course activities and assessments require ongoing development and integration of knowledge and skills acquired in previous courses. Required components include:

Required Component	Projected Points	Material to be Covered
Final Exam: Reflective 1 page essay on 3 concepts that deeply resonated with the participant.	10	9 weeks of presentations and discussions
Participate in mock debate on genetically modified foods.	10	Group-based preparation and 5-10 minute presentation and full group discussion on a clinical recommendation to a mock patient regarding genetically modified foods.
Fill out form for suggested topics and presenters	10	N/A

Policies & Resources

Academic Support Resources at MSUCOM

Students are encouraged to connect with [Academic and Career Advising](#) (ACA) to access academic, board, and career advising across the 4-year D.O. curriculum. As a way to acclimate to the MSUCOM curriculum, you may access ACA's [On Target](#) website for semester roadmaps, tools needed to be successful in the curriculum, and targeted resources for different learning situations. Each semester's roadmap contains course expectations, tips, potential challenges, notes on longitudinal content and skills integration, and study guides.

College or University Policies with Which Enrolled Students Must Be Familiar

Policy	Location
Common Ground Professionalism Initiative	MSUCOM CGPI Site
Computer-Based Testing	MSUCOM D.O. Student Handbook pp. 39-43
Disability & Reasonable Accommodation	MSUCOM D.O. Student Handbook p. 13
iClicker	MSUCOM D.O. Student Handbook p. 36
Mandatory Class Sessions & Examinations	MSUCOM D.O. Student Handbook p. 43
Medical Students Rights and Responsibilities	Office of Spartan Experiences Site
MSUCOM Academic Code of Professional Ethics	MSUCOM D.O. Student Handbook pp. 66-67
Osteopathic Clinical Training & Student Safety	MSUCOM D.O. Student Handbook pp. 68-72
Preclerkship Attendance & Absence	MSUCOM D.O. Student Handbook pp. 43-45
Relationship Violence & Sexual Misconduct & Title IX	Office for Civil Rights & Title IX Education & Compliance Site
Religious Observance Policy	Office of the Registrar Site
Remediation	MSUCOM D.O. Student Handbook p. 39

Student Feedback

MSUCOM values student feedback, using this to model practice-based learning and improvement and to promote continuous quality improvement of learning experiences.

Route	Description
Informal	We invite you to respectfully provide constructive suggestions to Course Directors, Contributing Faculty, or Curriculum Assistants at any time.
Formal	MSU sends a Student Perceptions of Learning Survey (SPLS) to enrolled students at the conclusion of each course to gain feedback on the course and Course Directors.

Course Schedule and Changes to Schedule or Requirements

Due to external circumstances (e.g., weather/maintenance closures, clinical obligations, student cohort needs, etc.), course requirements published in the course syllabus and/or course schedule may be subject to change. Timely communication regarding changes will be provided to enrolled students via the course [D2L](#) site, [Google Calendar](#), and/or [MSU email](#). Contact curriculum assistants with questions. Any changes made will be considerate of the [MSU Code of Teaching Responsibility](#) and the [Medical Students Rights and Responsibilities](#).

Special Note on Trauma and Spirituality

The course will invite thought and discussion on spirituality. Discussions of healing from adverse childhood events (ACE's) trauma may touch on spirituality. This course intends to invite thought and even reflection on attachment and how it relates to spirituality as it relates to restoring the body, heart, and mind's homeostasis (integration). All world views are welcome in discussion. Listening to others world views in patient and kind fashion and expressing appreciation for everyone's life journey is expected. There is no expectation that a certain world view will be adopted by participants, merely noting how powerful spirituality can be in the process of integration after trauma is the goal. These discussions can be triggering, and each individual participant is reminded of the myriad resources MSU and MSUCOM makes available to them should they be required.

Addendum: Course Schedule

Updated 11.7.24

Date	Time	Topic/Title	Faculty	Event Type & Origin [options]	Notes
2/6/25	5:00pm-6:30pm	Course intro & Science of Functional Nutrition (Keeping Young Athletes Healthy)	Pohlod	Zoom Link EL/MUC/DMC	Mandatory
2/13/25	5:00pm-6:30pm	Critical Thinking Project Kick-Off.	Restini	Zoom Link EL/MUC/DMC	Mandatory
2/20/25	5:00pm-6:30pm	Science of Genetic Modification	Richie/Pohlod	Zoom Link EL/MUC/DMC	Mandatory
2/27/25	5:00pm-6:30pm	Science behind gut microbiome	Zatkin	Zoom Link EL/MUC/DMC	Mandatory
3/6/24	NO CLASS	SPRING BREAK	NO CLASS	NO CLASS	
3/13/25	5:00pm-6:30pm	Genetically Modified Salmon Project Presentations	Group	Zoom Link EL/MUC/DMC	Mandatory
3/20/25	5:00pm-6:30pm	Diet Topic TBD	Douma	Zoom Link EL/MUC/DMC	Mandatory
3/27/25	NO CLASS	AAO CONVOCATION	NO CLASS	NO CLASS	
4/3/25	5:00pm-6:30pm	Science of Yoga	Grimshaw	Zoom Link EL/MUC/DMC	Mandatory
4/10/25	5:00pm-6:30pm	Epigenetics and Environment	Hammer	Zoom Link EL/MUC/DMC	Mandatory
4/17/25	5:00pm-6:30pm	Vegetotherapy	Gordon	Zoom Link EL/MUC/DMC (Origin Merida Mexico Zoom)	Mandatory