



College of
Osteopathic Medicine

ANTR 510 – Clinical Human Gross Anatomy and Palpatory Skills

Summer Semester 1 – 2022

(Updated 06/09/2022 MAM)

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Notice to Students: Although course syllabi at MSUCOM have a consistent format, vitally important details differ by course. For this reason, you must read the syllabus thoroughly at the onset of each course to know what the course will provide and what is expected of you.

Syllabus Disclaimer

This ANTR 510 Course Syllabus represents a sincere effort on the part of the Course Coordinator and faculty to provide a set of policies and procedures that allow for fair and efficient administration of the course to all duly enrolled students. However, unforeseen circumstances or unintended policy consequences may require modification of this syllabus during the semester. The Course Coordinator reserves the right to amend this syllabus to accommodate and adapt to any unforeseen circumstances or unintended policy consequences provided all duly enrolled students are treated in a fair and equitable fashion without compromising the instructional objectives of the course. All students will be notified of any syllabus amendments via an oral class announcement, email broadcast and web posting.

Section 1 – Course Information

Course Description

Anatomy is concerned with the structure and function of the body. It is the basic biological course in which students learn the morphological setting upon which clinical knowledge and experiences are built. Clinical Human Gross Anatomy and Palpatory Skills is an 8-credit course in which human gross anatomy is approached from the gross structural, developmental and radiological perspectives. Students will acquire their anatomical knowledge through faculty lectures, videos, anatomical websites, interactive software, and clinical case discussions and problem sets.

Measurable Course Objectives

The American Osteopathic Association has identified osteopathic core competencies (OCC) essential for your practice as a future osteopathic physician ([reference](#)). These are embedded throughout our programmatic objectives and curriculum. Our curricular structure also encourages your proficiency in the Core Entrustable Professional Activities (EPAs) for Entering Residency as defined by the Association of American Medical Colleges to help you build toward that future phase of your journey toward medical practice ([reference](#)). By the end of this specific course, you should be able to achieve the following objectives within each domain indicated:

Medical Knowledge

1. Summarize gross anatomical and physiological structure-function relationships to differentiate between normal and abnormal function. This includes the anatomy of all body systems which will be utilized in third year clerkships and utilization of proper terminology to describe gross anatomical structures. (*Biomedical Science - Anatomy/Physiology*)
2. Describe the physiologic basis of health and the pathophysiologic basis of disease through the study of embryological development and selected clinical presentations related to anatomy. (*Biomedical Science - Pathology/Pathophysiology*)
3. Summarize the structural, functional, and pathologic basis for selected neurologic and anatomically-related disorders by applying knowledge of normal structure-function relationships during patient evaluation. (*Biomedical Science - Neuroscience*)
4. Explore common presentations related to anatomical structure-function relationships that intersect with clinical disciplines. (*Clinical Science - Neurology, Clinical Science - Neuromusculoskeletal, Clinical Science - Radiology, Clinical Science - Internal, Clinical Science - Obstetrics/Gynecology, & Clinical Science - Otorhinolaryngology/Ophthalmology*)

Osteopathic Principles, Practice, and Manipulative Medicine

5. Apply osteopathic principles such as the osteopathic tenets and the values of holistic, person-centered care to the study of anatomy through self-directed learning, experiential learning, and reflection. This includes training related to OMM/OMT observation and application to identify palpable surface landmarks. (*OPP Principles/Integration, OMM/OMT Principles/Integration, & OMM/OMT Observation/Application*)

Patient Care and Procedural Skills

6. Identify basic principles of medical imaging techniques, coupling this knowledge with anatomical and physiologic knowledge to interpret medical images. (*Diagnostic Testing - EPA 3*)

Professionalism

7. Provide for one's personal care and well-being by applying the principles of wellness to one's first semester as a student of osteopathic medicine with a sense of compassion and respect. (*Self-Care*)

Professional Development and Reflection Skills

Additionally, the American Osteopathic Association indicates several other competencies on which professional development and reflection across time will foster effective medical practice. These include the ability to work collaboratively as part of an interprofessional team; the maintenance of an inquisitive and scientific approach to learning and medical practice; and the adoption of self-direction in lifelong learning and clinical decision-making. This course will contribute to the development of these longitudinal competencies or skills as indicated:

Self-Directed and Lifelong Learning

It is a goal at MSUCOM to promote self-directed learning to help our students grow into strong, self-directed future clinicians. Self-directed learning is also required by medical school accreditation standards. Self-directed learning is a 4-step process that occurs within an encapsulated timeframe. ANTR510 is organized into four units, which begin with presentation of related learning objectives and end with a unit examination. Across these units, you will see the 4 steps of self-directed learning take shape as follows:

1. **Self-Assessment of Learning Needs** – Units begin with the presentation of learning objectives, providing opportunities to engage in guided self-study with related learning resources. Students are encouraged at various points across the unit to reflect upon their knowledge, skills, and comfort related to learning objectives, identifying related learning needs.
2. **Identification, Analysis, & Synthesis of Information** – As students gain a sense of their learning needs, they are provided ongoing opportunities to resolve these needs through practice questions and virtual office hours in which faculty make themselves available for student-driven questions related to content and skills.
3. **Appraisal of Information Credibility** – As students synthesize their knowledge from learning activities and engagement in additional opportunities to meet learning needs as necessary, they have the opportunity to appraise and apply their knowledge in collaborative case discussion review activities. These are facilitated in team settings with the aid of peer collaboration and faculty facilitator feedback.
4. **Feedback on Information-Seeking Skills** – Finally, students are provided with two opportunities for formalized feedback at the end of each unit. The first is a formative, individual assessment (practice exam). Students are able to take the assessment, view their scores, and ask clarifying questions in virtual faculty office hours. Students can then use this feedback to focus their studies for the summative unit exam, the latter of which provides students with another point of feedback to inform related study.

Course Coordinator & Course Leadership

Course Coordinator

Name: Carrie Nazaroff, Ph.D.
Phone: 586-263-6743
Email: tatarcar@msu.edu (preferred method)
Address: MUC Campus

OMM/OPP Liaison

Name: J'Aimee Lippert, D.O.
Email: boseljai@msu.edu (preferred method)
Address: A439 East Fee Hall

Lab Director

Name: Nicole Geske, Ph.D.
Phone: 517-353-5269
Email: geskenic@msu.edu (preferred method)
Address: A501B East Fee Hall

Top Hat/APR/BioDigital Platform Liaison

Name: Nicole Geske, Ph.D.
Phone: 517-353-5269
Email: geskenic@msu.edu (preferred method)
Address: A501B East Fee Hall

Library Resources Liaison

Name: Sarah Tilden, Ph.D.
Phone: 313-578-9612
Email: tildensa@msu.edu (preferred method)
Address: DMC Campus

Radiology Resource Liaison

Name: John Fitzsimmons, M.D.
Phone: 517-353-4547
Email: fitzsi10@msu.edu (preferred method)
Address: A507 East Fee Hall

Curriculum Assistants

Site	Name	Email	Phone
East Lansing	Robin Borowski	chambe27@msu.edu	517-353-9515
DMC	Smita Deb	debsmita@msu.edu	517-884-9628
MUC	Beata Rodriquez	rodri583@msu.edu	586-263-6799

Course Faculty/Instructors

Course Faculty/Instructors – Anatomy/Radiology

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Course Faculty/Instructors – OMM

Name	Email	Site
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Lines of Communication

- For administrative aspects of the Course: contact the course coordinator.
 - Questions concerning the course (all aspects including assignments, exams, D2L site, etc.) may be discussed individually by making an appointment with the Course Coordinator, Carrie Nazaroff via e-mail (tatarcar@msu.edu). The Course Coordinator is generally available by appointment for one-on-one zoom meetings.
- For anatomy lab questions, logistics, and inquiries regarding the student assistants (Blue Coats): contact the lab director, Dr. Nicole Geske.
- For OMM lab questions & logistics contact the OMM/OPP Liaison, Dr. J'Aimee Lippert.
- For questions relating to the location, access and/or use of online library resources: contact the Library Resources Liaison, Dr. Sarah Tilden.
- For questions relating to the location, access and/or use of Department of Radiology image banks and sources: contact the Radiology Resource Liaison, Dr. John Fitzsimmons.
- For questions relating to course content the following options are available:
 - D2L Course Discussion Forum (see Discussion Forum information in "Tips for Success" document on course D2L site).
 - Virtual Office Hours (see Virtual Office Hours information below).
 - Faculty Appointment (see faculty contact information above).
- For absences/missed exams (see excused absence information below).
- Please set your notifications in D2L to immediate to receive posted News announcements. You may choose to receive notifications by email or SMS.

Virtual Office Hours

Virtual office hours will be available via Zoom periodically during the the ANTR 510 course (see ANTR 510 Course Schedule for times). Three of these virtual office hour sessions will be staffed by a radiologist and will be dedicated to questions regarding radiology content. Note that office hours will be held via Zoom meetings and are not necessarily one-on-one meetings with faculty. For private office hour sessions please make an appointment with the Course Coordinator, Carrie Nazaroff, or your local gross anatomy instructor.

Course Web Site

The URL for the Course web site is <https://d2l.msu.edu>.

The course D2L site is the administrative website for the course. Access the ANTR 510 D2L site for the following information:

- **Announcements** – Course-related communication to the class will be made here. You should check ANNOUNCEMENTS on a daily basis. If you do not you will miss something important along the way.
- **Course Syllabus:** Information about textbooks, grading system, rules and regulations, etc. as well as information on the instructional team.
- **Course Schedule:** Organized by unit; this document provides information on all the unit's scheduled ANTR 510 events, as well as a list of the unit's assignments, along with an estimate of the amount of time required to complete each.
- **Anatomy Lab Group Assignments:** Anatomy Lab Group schedules will change each day. Consult the Academic Calendar to learn your lab time each day.
- **Unit Exam Information & Exam Policies:** Information about exam expectations and policies.
- **Unit Assignments Documents & Unit's Content Discussion Forum:** Unit Assignment documents are the master lists of the unit's activities and associated learning objectives. A separate discussion forum will be dedicated to each unit of the course. Each discussion forum is a list of student-derived content questions. It is highly recommended that you check the discussion forum prior to posting a new question as it is very likely that you are not the only student with a given question and it may have already been answered. ***Content based questions will not be answered if sent directly to the lecturing faculty.*** Please utilize the Discussion Forum for all inquiries regarding course content.
- **Unit Practice Exams:** These scheduled, timed practice exams are located under "assessments".
- **Recorded Lectures and Archivable Course Content Resources** – All recordings of lectures presented "live" in the course (in-person and via Zoom) will be located in the Course Media Gallery. The ANTR 510 D2L site will also host PDF versions of the non-interactive course materials located on Top Hat and any OPP-related materials.
- **Exam & Course Grades:** Once finalized, exam scores and course grades will be made available to you on the D2L page.

ANTR 510 Top Hat Course

Top Hat is a content delivery software that will be used to house course content and self-assessment questions. This interactive course administration platform is exceptionally easy to use and houses individual "pages" of ANTR 510 course content that include embedded pre-recorded lectures, YouTube videos, BioDigital models, links to MSU library resources and, most importantly, numerous self-assessment questions. Note that printer friendly versions of the non-interactive Top Hat "pages" will be available on the course D2L site.

Course Resources

Required Resources

- **Course Administration Resources/Tools:**

- **Top Hat Account:** Go to the [Top Hat](#) website to purchase a one term student subscription to *Top Hat Pro*. The course name and join code are: ANTR 510 – Clinical Human Gross Anatomy and Palpatory Skills 2022; Join Code: 322049

As noted above, the *Top Hat* platform will be used to house course content resources including Self-Assessment Questions.

- **iClicker Student:** Refer to your pre-matriculation documents for obtaining this polling technology. *iClicker Student* will be used extensively throughout years 1 and 2 of the MSUCOM curriculum.

In this course, input received via *iClicker Student* may be used to provide practice with concepts and principles, and to stimulate discussion.

Please refer to additional *iClicker Student* policy information provided in Section 2 of this syllabus.

- **Course Content Resources**

- **Anatomy & Physiology Revealed (APR) Student User License:** Available at a special discounted price for MSUCOM students, purchasing details will be provided during Orientation.

In addition to serving as a general human anatomy resource, students will be referred to the 2D images of layered (superficial to deep) “dissections” in several of the Top Hat activities. APR images will also be used in make-up exams.

- **VH Dissector (VHD) Pro 6:** MSUCOM is providing each member of the Class of 2026 a 4-yr license for the VH Dissector Pro 6.0 program. Each student will receive an email from ToLTech (support@toltech.net) with their product key and download instructions.

Built on real anatomy from the National Library of Medicine's Visible Human Project®, the VH Dissector Pro software is a one-of-a-kind product that provides students the ability to interact with correlated 3D and cross-sectional views of over 2,000 anatomical structures. The platform is an excellent resource for learning the complex three-dimensional structure of the human body and is especially useful for learning the cross-sectional anatomy needed to interpret CT, MRI and Ultrasound images. Captured images from the VHD software will be used in the Unit Assessments.

- **Additional Online Resources:** Links to additional required online resources are embedded within the course materials. These resources come from the following sources:

- **Acland's Video Atlas of Anatomy**, Wolters Kluwer – available at no cost through the MSU Health Sciences Digital Library (Anatomy Multimedia Resources: <https://libguides.lib.msu.edu/anatomy-resources>)
 - **University of British Columbia (UBC) Clinical Anatomy** (Open Education Resource: <https://libguides.lib.msu.edu/anatomy-resources>)
 - **YouTube**, (Noted Anatomist, etc.)
 - **Clinically Oriented Anatomy**, 9th ed., 2023, Moore, Dalley, & Agur, Lippincott, Williams & Wilkins, available at no cost through the MSU Health Sciences Digital Library (<https://libguides.lib.msu.edu/medicalebooks>)
- A small number of select pages from the following textbooks are required reading for the course. These textbooks are all included in the MSU Online Library Resources and can be accessed online:
 - **Clinically Oriented Anatomy**, 9th ed., 2023, Moore, Dalley, & Agur, Lippincott, Williams & Wilkins
 - **Gray's Anatomy for Students**, 4th ed., 2020, Drake, Vogl, Elsevier
 - Videos from the following resources are required viewing for the course:
 - **Clinically Oriented Anatomy**, 9th ed., 2023, Moore, Dalley, & Agur, Lippincott, Williams & Wilkins
 - **Acland's Video Atlas of Anatomy**, Wolters Kluwer
 - **YouTube**, (Noted Anatomist, etc.)
- **Other Required Equipment: Students are responsible for purchasing the following items:**
 - **White lab coat AND/OR surgical scrubs:** see “Laboratory Attire & Personal Protective Equipment” section below.
 - **Safety glasses:** certified to ANSI Z87 (NOTE: Prescription eyeglasses are not considered safety glasses unless they have both side shields and shatter resistant lenses). Safety glasses are available at MSU Stores or can be obtained from an online vendor.
 - **Disposable, nonlatex, gloves** (NOTE: As some individuals are allergic to latex, latex gloves are NOT allowed in the lab).
 - **Blunt-tip metal dissection probe** (NOTE: You will be responsible for maintaining and storing your probe; probes will NOT be provided by MSUCOM).
 - **Name tag:** If students have not yet received their COM name tags prior to mid-July paper name tags will be provided by the Gross Anatomy Lab (GAL) staff.

Other ANTR 510 Course Resources

- **McKesson Study Share** (<https://horizon.rad.msu.edu/studyshare/hss/casemanager>): This is a site with a plethora of radiological images organized by the Department of Radiology for this course. Some of the CT and MRI studies have “loops” that you can load so as to view the studies as a radiologist would. Students will be given instructions as to how to access this site during orientation to the course.
- **MSU Health Sciences Digital Library** (<https://lib.msu.edu/health/medicine/>): This site provides links to a variety of online resources for medical students and health professionals. The electronic textbooks listed below are recommended for those looking for additional clarification of topics

covered in the course. These ebooks are available at the following link:

(<https://libguides.lib.msu.edu/medicalebooks>).

- ***Clinically Oriented Anatomy***, 9th ed., 2023, Moore, Dalley, & Agur, Lippincott, Williams & Wilkins
- ***Gray's Anatomy for Students***, 4th ed., 2020, Drake, Vogl, Elsevier

Special Instructions Pertaining to COVID-19

Regarding the use of face masks in educational settings, per current MSUCOM policy,

- At the DMC site: a face mask will be **required** in all areas at the DMC Campus due to local policy.
- At the East Lansing and Macomb site: Masks will be **recommended** in lectures, classrooms, study spaces, meeting rooms, etc. when the COVID-19 Community Level is “High”, and **optional** when the level is “Medium” or “Low”.
- At all three sites: A surgical-style disposable face mask will continue to be **required** during summer semester 2022 in clinical skills labs (OMM and OPC), on clinical assignments or preceptorships, and in the Learning and Assessment Center. You may choose to use a cloth mask over a surgical mask, or use a KN95 or N95 mask instead.

Course-based Academic Support

The course faculty are here to facilitate your learning. Please feel free to contact the Course Coordinator with any personal issues you may have involving this course. Additional academic support resources can be accessed through MSUCOM Academic and Career Guidance and MSUCOM Personal Counseling.

Course Begin and End Dates

ANTR 510 begins on June 20, 2022 and ends on August 18, 2022. See addendum for detailed daily course schedule.

Unit Assessment Details and Policies

All ANTR 510 Unit Assessments are **SECURE**. Each assessment will have 90 questions and will be divided into a “Learning Objectives” component and an “Anatomical Structures” component. Each assessment covers material and assignments listed in the unit’s “Unit Assignments” document.

Learning Objectives: This component of each Unit Assessment will have 40-50 multiple-choice, **one best answer** questions that include narrative questions and imaging or cross-sectional based identification questions. The questions in the Learning Objectives component of the Unit Assessment will link directly to one or more of the learning objectives listed in the “Unit Assignments” documents.

Anatomical Structures: This component of each Unit Assessment is a laboratory practical exam. The Anatomical Structures component will consist of 40-50 **one best answer** fill-in-the-blank questions. Questions in this portion of the Unit Assessment may be either first-order (e.g., identify the structure) or second-order (e.g., identify the innervation of the structure). Structures that can appear on the

Anatomical Structures component of the Unit Assessment are listed in the tables of the unit's "In the Lab" documents.

Unit Assessments will be given only at the date and time specified. Make-up exams will be offered only to those students with an excused absence.

In order to maintain security of assessments, you may NOT post questions regarding exam questions on the discussion board. Instructions for how to review exam questions will be provided by the course coordinator in advance of the first unit exam.

Additional details regarding the Unit Assessments will be provided prior to the first Unit Assessment.

Course Grades

Course grades will be determined by the following criteria:

Anatomy Lab Attendance & Participation: It is expected that students attend and actively participate in all scheduled anatomy labs. Students attending and participating in the full lab experience will be awarded 1 lab point. A student may earn up to 12 anatomy lab points. Your participation in the post-lab quiz will be used to monitor lab attendance. The post-lab quiz will consist of 8-10 questions linked to the lab's content (or previous content) and will require the use of *iClicker Student*. Student performance on post-lab quizzes will be monitored by the anatomy instructors. Make-up post-lab quizzes will not be offered.

OMM & Ultrasound (US) Lab Attendance & Participation: It is expected that students attend and actively participate in all scheduled OMM and US labs (ANTR 510 "skills" labs). Students attending and participating in the full lab experience will be awarded 2 lab points. Attendance will be monitored by the local CAs. A student who fails to attend a skills lab is required to make-up the lab experience in a timely manner. Students who make-up a skills lab with an excused absence will be awarded lab points; students who make-up a skills lab without an excused absence will not be awarded lab points. A student may earn up to 10 skills lab points.

CoreWellness Session Attendance: It is expected that students attend all scheduled live CoreWellness sessions. Students in attendance at a CoreWellness session will be awarded 1 point for that session. Attendance will be monitored by the course CAs. A student who fails to attend a CoreWellness session will not earn the session point. Make-up sessions will not be scheduled.

Scores on the Learning Objectives component of the Assessments: The Learning Objectives component of each exam will be worth 40-50 points.

Scores on the Anatomical Structures components of the Assessments: The Anatomical Structures component of each exam will be worth 40-50 points.

Point Opportunities	Material to be Covered	Number of Points
Unit 1 Assessment	Unit 1 Learning Objectives & Structure Hit Lists	90

Point Opportunities	Material to be Covered	Number of Points
Unit 2 Assessment	Unit 2 Learning Objectives & Structure Hit Lists	90
Unit 3 Assessment	Unit 3 Learning Objectives & Structure Hit Lists	90
Unit 4 Assessment	Unit 4 Learning Objectives & Structure Hit Lists	90
Anatomy Labs	Lab Structure Hit Lists	12
Skills Labs	Palpatory Landmarks & US Basics	10
CoreWellness Sessions	CoreWellness Modules 1-3	3
Total Points Possible		385

Your Final Percent Score will be determined by the following formula:

$$\frac{(\text{Exam 1} + \text{Exam 2} + \text{Exam 3} + \text{Exam 4} + \text{Anatomy \& Skills Lab points} + \text{CoreWellness points})}{(\text{total points possible})} \times 100\% = \text{Final Percent Score}$$

- **P-Pass**—means that credit is granted and that the student achieved a level of performance judged to be satisfactory by the instructor. To obtain a “P” grade for this course, a student must:
 - Earn 70% of the points that contribute to the Final Percent Score,
 - AND
 - Achieved a score of at least 45% on each Unit Assessment (combined LO & Anatomical Structure components),
 - AND
 - Have no more than two unexcused anatomy lab absences.
- **N-No Grade**—means that no credit is granted and that the student did not achieve a level of performance judged to be satisfactory by the instructor.

Your final course grade will be reflected in D2L.

Course Remediation Policy

The MSUCOM Policy for Retention, Promotion and Graduation requires successful completion of each required course to progress in the curriculum. If you receive an “N” grade in a course, you must meet the course requirement by successfully remediating or repeating the course.

In the ANTR 510 course students receiving an “N” grade will be eligible to sit for remediation if the following criteria are met:

- The student earned a Final Percent Score of at least 60% or greater.
- The student attended at least 12 anatomy labs.

The remediation opportunity for this course will be by examination and will cover the content of the entire course. In order to pass remediation a student must earn a 70% on the remediation exam.

The remediation exam will be offered on August 23, 2022. Refer to the remediation policy information provided in Section 2 of this syllabus for more information.

Gross Anatomy Lab Policies

Gross Anatomy Lab User's Agreement: In order to participate in the gross anatomy labs scheduled during this course, this semester, and throughout the MSUCOM curriculum, students must read and sign the Gross Anatomy Lab User's Agreement. Further instructions on completing this requirement will be made available during the Semester 1 Orientation session on June 14th.

Lab Attire and Personal Protective Equipment (PPE): Professional lab attire and Personal Protective Equipment (PPE) are required for all individuals who enter the anatomy laboratory. The purpose of the lab attire and PPE is to prevent skin contact with the various chemicals and solutions encountered in the gross anatomy facility.

The following professional lab attire and PPE is expected for individuals handling anatomical material or in contact with the solutions used in the care of anatomical material when working with prosected floor donors and donor bucket specimens:

- Closed-toe shoes and one of the following:
 - Shirt that covers the shoulders, long pants and a lab coat;
 - Long-sleeved T-shirt under surgical scrubs.
- Safety glasses certified to ANSI Z87 (NOTE: Prescription eyeglasses are not considered safety glasses unless they have both side shields and shatter resistant lenses);
- Disposable nitrile* gloves (**NOTE:** As some individuals are allergic to latex, latex gloves are NOT allowed in the lab).

Personal Devices: Your course resources may be accessed via iPad, tablet, smart device, etc. in the gross anatomy labs at all three MSUCOM locations. You may bring these electronic devices into the gross lab during faculty-scheduled time as well as open lab hours in the evening and on weekends. ***With this privilege you are to make no attempt to photograph, video, or otherwise reproduce any image of human anatomical material located in any area of any anatomy laboratory with an electronic device.***

As noted in the MSU Human Gross Anatomy Lab Guidelines and Laboratory User Agreement, the use of personal electronics on the teaching floors are strictly for educational uses only. Texting and phone calls, should your device have those capacities, will be managed out in the hallway. Other non-educational activities, such as playing games, emailing, watching movies, etc. are also not allowed.

OMM Lab Policies

Required Attire for OMM Laboratories: Scrubs, sweatpants and shorts with elastic waistbands (no denim materials) are required attire for all Osteopathic Manipulative Medicine Laboratories. Also acceptable are tank tops, T-shirts, bathing suit tops, sports bras, and scrub tops. Button-down shirts and

other street clothes are not allowed. Students who do not follow these guidelines may be dismissed from lab and counted as an un-excused absence that day.

What to Bring: Due to limited space in the OMM Labs, students must bring to class only those materials necessary for lab. Backpacks, large purses, etc., need to be stored in the lockers provided.

Ultrasound (US) Lab Policies

Consent Regarding Role as an US Model: In the US labs students will be performing peer physical examinations using palpation and ultrasound within an assigned pod. The latter will involve the application of US gel followed by the direct contact of skin with an ultrasound transducer. Students may consent or decline consent to serve as a model for other students in their group. Students serving as models have the right to end an examination at any time if they feel emotionally or physically uncomfortable. If you agree to serve as a model, it is with the understanding that these exercises are for educational purposes only and not for diagnosis. Learners may miss abnormalities that may be present or find abnormalities that are not in fact present. If any incidental findings or suspected abnormalities are identified during this educational exercise, supervising faculty or COM Lab Leadership will instruct you to follow-up with your personal healthcare provider.

Required Attire for US Laboratories: Scrubs, sweatpants and shorts with elastic waistbands (no denim materials) are all acceptable attire for US labs. Also acceptable, and in some cases preferred, are tank tops, T-shirts, bathing suit tops, and sports bras. Stretchable bathing suit tops are preferred for those serving as models in US Lab 2.

What to Bring: If you intend to serve as a simulated patient/model for the US labs you must bring a towel to wipe the US gel from your skin. Due to limited space in the OMM Labs where the US labs are held, students must bring to class only those materials necessary for lab. Backpacks, large purses, etc., need to be stored in the lockers provided.

Lab Group Assignments & Lab Absences

While the needs of individual students will be accommodated whenever possible, **it is NOT possible to allow students to switch assigned lab groups during the course.**

- If you are absent from your regularly scheduled **anatomy** lab time you must make up that time during open lab hours and not attend another regularly scheduled lab.
- If you are absent from your regularly scheduled **OMM** lab time you must schedule a make-up lab experience at the East Lansing site with Dr. Lippert and not attend another regularly scheduled lab.
- If you are absent from your regularly scheduled **US** lab time you must contact your local US instructor to arrange for a make-up lab experience at your site (EL – Dr. Fitzsimmons or Dr. Geske; DMC – Dr. Tilden; MUC – Dr. Wolf) and not attend another regularly scheduled lab.

Frequently Asked Questions

Can I bring a friend or family member to lecture or lab?

NO. Attendance is restricted to only duly enrolled students or teaching staff. The Department of Radiology strictly adheres to the University policy regarding who may attend ANY regularly scheduled sessions of ANTR 510. Thus, all attendees must either be enrolled in the course, approved Supplemental Instruction leaders, or members of teaching faculty assigned to the course. Tutors approved by the College of Osteopathic Medicine, but not officially part of the Radiology teaching team, are allowed in the laboratory during open unscheduled times when students are not in assigned labs.

Are Scribes allowed?

Note-taking (scribing) by an enrolled medical student in your class is permitted but the faculty take no responsibility for the accuracy or validity of their notes and will not edit, correct, or proofread materials generated in such scribing activities. **Commercial note-taking by any person not in the course is prohibited.**

Can I obtain hands-on experience in human dissection?

Medical students that wish to obtain dissection experience and explore gross anatomy in greater depth may do so by enrolling in ANTR 585 Directed Study in Human Prosection years 1 or 2 or ANTR 685 Clerkship Prosection in years 3 or 4. ANTR 585/685 is generally offered in the spring and summer and fall semesters every year but requires enrollment override authorized by Dr. Loro Kujjo (ANTR 585) and/or Dr. Geske (ANTR 685). This course is an independent study laboratory course in which students prepare prosections used for study in the courses taught by both medical colleges. Students are assigned 3 or 4 (depending upon complexity) prosection projects, and are expected to prepare for accurate laboratory work by reviewing their materials from ANTR 510. Anatomy Faculty along with hired Laboratory teaching assistants can help in the prosection lab to assist you with skills, mastery, and interpretation of instruction.

Minimum enrollment is for 1 credit hour for first-time students. Students are expected to spend between 8-10 hours per credit per week in the gross anatomy lab. The number of positions available is limited and determined each semester on the basis of the number of specimens available for prosection and the needs of the gross lab. Students wishing to take advantage of this opportunity should contact Dr. Loro Kujjo, Course Coordinator for ANTR 585.

Student Evaluation of the Course

We want your feedback on how to improve this course.

- Informal Feedback: Feel free to approach the Course Coordinator, Dr. Carrie Nazaroff, or any of the other course faculty with your reactions and suggestions.
- Formal Evaluation: In addition to the above, we ask every student in the class to complete formal on-line course evaluation upon conclusion of the course. Student feedback provides Course Coordinators with valuable information regarding their performance, the performance of their colleagues, and the quality of the course. The information gained from these evaluations is used to continuously improve future offerings of this course. Students can access the evaluation system at: [MSUCOM Pre-clerkship Evaluation System](#).

Section 2 – Policies

Please refer to the Student Handbook at <https://com.msu.edu/current-students/student-handbook-course-catalog> for these and other policies.

Academic Honesty and Professionalism

Every student is responsible for their behavior and is expected to adhere to all MSU and MSUCOM policies of academic honesty and professionalism, as outlined in the MSUCOM Student Handbook and the MSU Medical Student Rights and Responsibilities. These documents may be found on the MSUCOM website. Additional guidance on academic integrity may be found on the MSU Ombudsperson's website at <https://ombud.msu.edu/sites/default/files/content/Academic-Integrity-at-MSU-updated-August-2017.pdf>

Incidents of academic dishonesty or professional misconduct will be addressed by the faculty, administration, or staff; such action may include, but is not limited to: giving a failing grade, referring a student for judicial review, directing the student to the Associate Dean of Medical Education, evaluation by the Committee on Student Evaluation, and other actions outlined in the Medical Student Rights and Responsibilities document.

Types of Class Sessions

MSUCOM designates lectures and other class sessions by their delivery method. While additional terms may be used in a specific course, the following will provide general guidance to the type of session:

- Live or livestream lecture: broadcast at a designated time; intended to be viewed synchronously
- Online Lecture: recorded content, may be viewed asynchronously
- Webinar: more interactive session where student participation is expected
- Lab: may refer to on-site clinical skills training or online lab session; see details

Changes to Course Schedule or Requirements

Due to external circumstances, the 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 and/or email. Any changes made will consider the MSU Code of Teaching Responsibility and the MSU Medical Students Rights and Responsibilities.

Mandatory and Optional Class Sessions

All lectures and other class sessions are considered to be integral to the course, and students are expected to attend, view, or participate in each session. Some sessions are designated as "mandatory" in that attendance at the session on the scheduled date and time is required. Depending on the course, a student may earn points for attending or participating in a mandatory session or may lose points for failing to attend or participate. Availability of make-up points for missed sessions is at the discretion of the course coordinator. Optional class sessions are offered by faculty to assist students in learning or reviewing course content.

Absences from Mandatory and Examinations/Assessments

It is the responsibility of the student to know which class sessions are deemed as mandatory and comply with the MSUCOM policy regarding absences from mandatory sessions and examinations. This policy

may be found in the MSUCOM Student Handbook on the MSUCOM website. Requests for an excused absence must be submitted via the [student portal](#).

Computer-Based Testing

It is the responsibility of each student to know and comply with the MSUCOM policy on computer-based testing. This policy may be found in the MSUCOM Student Handbook on the MSUCOM website.

Administration of quizzes, examinations, and other assessments may be self-proctored, virtual proctored, or classroom proctored. Regardless of the proctoring method, you are expected to take the exam in a quiet, private setting. Just like in a proctored exam, you are not to access notes, textbooks, references, your phone, or other materials, and you are not to interact with fellow students or others. Remember that integrity is defined as what you do when no one is looking.

You are also expected to not record, photograph, take screen shots, make notes of, or otherwise attempt to make a copy of any exam item for any purpose, including your personal use. A student who is discovered to have cheated or breached exam security will be subject to formal disciplinary action, up to and including dismissal from MSUCOM.

If you have concerns or evidence of an exam security breach on this or any exam, you may report that to an MSUCOM administrator or through the online concern form.

Medical Student Rights and Responsibilities

If problems arise between instructor and student, both should attempt to resolve them by informal, direct discussions. If the problems remain unsolved, the Associate Dean for Medical Education and/or the MSU Ombudsperson may be consulted. The MSU Medical Student Rights and Responsibilities (MSRR) document defines processes for additional steps, including submission of a formal grievance. The MSSR may be found in the MSUCOM Student Handbook and online at splife.studentlife.msu.edu.

iClicker Student Policy

It is your responsibility to know and comply with the iClicker Student Policy. This policy may be found in the MSUCOM Student Handbook. If you forget your device or if it does not work, for whatever reason, no make-up experiences will be provided, and no points will be given.

If iClicker Student is used to take attendance for an on-campus event, you will be expected to arrive to the physical location on time and to stay for the duration of the assigned activity. If iClicker Student is used to take attendance for an online event, you will be expected to start the session at the scheduled time and participate for the duration of the assigned activity.

As a matter of professionalism, please note that under no circumstances should you provide access to your iClicker Student account to another student by sharing your device and/or account login, nor should you accept another student's device or login credentials to access iClicker Student on their behalf. Answering questions or checking in for attendance on behalf of another student by using their device or account is considered to be academic dishonesty and may result in disciplinary action up to and including dismissal from the college.

Remediation

The MSUCOM Policy for Retention, Promotion and Graduation requires successful completion of each required course to progress in the curriculum. If you receive an “N” grade in a course, that grade will be recorded on your official transcript; you must meet the course requirement by successfully remediating or repeating the course.

Eligibility to attempt remediation of the course is determined by criteria described in the “Course Grades” section of the syllabus. If you are not eligible to attempt remediation, or if you fail the remediation, you must retake the course, provided you are eligible to continue in the program as determined by the Committee on Student Evaluation.

Student Safety and Well-being

The MSUCOM website and Student Handbook provide information on student safety, campus security, access to medical care and counseling services, and to policies on injuries and exposures. If you have an injury or acute illness on campus, an incident report should be completed. The form is available on the MSUCOM intranet or from Academic Programs.

Academic Support Resources at MSUCOM

As a way to acclimate you to the curriculum at MSUCOM, we have created a program called On Target: <https://michiganstate.sharepoint.com/sites/OnTargetforAcademicSuccess>

On this site you will find semester roadmaps which gives a general overview of each semester, tools needed to be successful in the curriculum and targeted resources for your unique learning situation. In each semester’s road map, you will also find course expectations, tips for success, potential trouble spots, longitudinal course integration, and specific course study guides.

Requests for Accommodations

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities (RCPD) at 517-884-7273 or online at rcpd.msu.edu. Once eligibility for an accommodation has been determined, you may be issued a Verified Individualized Services and Accommodation (VISA) form. Each VISA includes an expiration date; to request an accommodation, you must have an active VISA. You may work with RCPD to renew a VISA.

During the preclerkship curriculum, the college will help to coordinate accommodations for additional testing time. Provide your VISA to Nancy Thoma, thoman@msu.edu, A333 East Fee Hall at the start of the term and/or at least two weeks prior to the assessment event (test, project, labs, etc.). Requests for accommodations received with less notice will be honored whenever possible. You may choose whether or not you wish to use accommodations for a particular event. For other accommodations, you may also review your VISA with the course coordinator and curriculum assistant assigned to that course.

Title IX Notifications

Michigan State University is committed to fostering a culture of caring and respect that is free of relationship violence and sexual misconduct, and to ensuring that all affected individuals have access to services. For information on reporting options, confidential advocacy and support resources, university policies and procedures, or how to make a difference on campus, visit the Title IX website at titleix.msu.edu.

Limits to confidentiality. Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, you should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues to protect the health and safety of MSU community members and others. Instructors must report the following information to other University offices (including the Department of Police and Public Safety):

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child;
- Allegations of sexual assault, relationship violence, stalking, or sexual harassment; and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the MSU Counseling and Psychiatric Services.

Addendum: Course Schedule

Course schedule for the current semester will be posted to D2L. Changes to the course schedule will be noted on the class academic calendar ("Google calendar") and communicated to students via D2L and/or email. The schedule for the most recent offering of this course will be posted on the MSUCOM website under Current Students/Preclerkship Curriculum.