

Human Anatomy

MEDS4052C (4 cr/hr)
Fall Semester 2021
Syllabus & Schedule



Course description

This course is designed to provide students with a comprehensive overview of human anatomy. It is well suited for those interested in pursuing a career in the healthcare field as well as students with a general interest in human anatomy. Instructional modalities include lecture, team-based learning, and human dissection laboratory. Anatomical regions covered include the back, vertebral canal and spinal cord, thoracic wall, pleural cavity and mediastinum, abdominal wall and contents, and lower and upper extremities. Emphasis will be placed on the clinical relevance of structure-function relationships.

Learning objectives

By the end of the course, students should be able to:

1. Describe the structural and functional organization of the human body and the interrelatedness of bony structures, musculature, innervation, organology, vasculature, and lymphatic drainage within each body region.
2. Apply knowledge of the anatomic organization and relationships of structures to identify and interpret anatomic views, landmarks, and normal structures on cadaveric specimens and in contemporary medical imaging.
3. Explain the anatomic basis for common clinical conditions, injuries, pathologies, and diagnostic/interventional procedures.
4. Demonstrate the communication and organizational skills necessary to accurately convey anatomic information with peers.
5. Demonstrate respect, integrity, responsibility, and self-discipline toward donors, peers, and faculty.
6. Analyze their understanding of the human body and use this information to guide their study of gross anatomy.

Course directors

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Learning Assistant

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Class meeting days/times

The class will meet three times a week. The days of lecture vs. lab will vary week by week, so it is critical that you pay close attention to the weekly schedule of events (see schedule below).

- **Lecture sessions 1:25pm~2:25 pm (Room: MSB 5051)**

Lectures sessions will consist of primarily PowerPoint presentations and/or active learning activities. Lecture video captures with audio will be made available for viewing, however, human error or technological difficulties could result in a session not being recorded. Thus, it is always recommended to attend lectures in-person. PowerPoint slides will be made available by the day of the lecture.

- **Laboratory sessions 1:25pm-3:15pm (Room: CARE R800)**

Anatomy dissection laboratories require advanced preparation. Students are required to read the dissector prior to a laboratory session so they are familiar with the dissection procedure and structures that will be covered in a given laboratory. In addition to the scheduled laboratory time, students should expect to spend an additional 1-3 hours per week completing and studying the dissections. **Attendance is required at these sessions.**

- **Team-based learning sessions 1:25~2:25 (Room: MSB 5051)**

Application exercise sessions are meant to synthesize content from each organ system. Details on these sessions can be found below. **Attendance is required at these sessions.**

Examination meeting days/time

Examinations will take place on during regularly scheduled class time (see schedule)

- **Lecture exam location: MSB 5051**
- **Laboratory exam location- R800**

Assessments

Format	Percentage of final grade	
Lecture exams (x3)	50%	Exam 1 = 10%
		Exams 2+3 = 20% each
Exam Question Assignments (x5)	5% (1% for each assignment)	
Team-based learning (TBL) activities (x4)	10% (2.5% for each TBL)	
Laboratory (practical) exams (x3)	35%	Practical exam 1 =5%
		Practical exams 2+3 = 15% each

Lecture exams: Lecture based exams will be multiple-choice format and cover information from lectures and laboratories leading up to the day of the exam. Lecture exams are NOT cumulative. The number of questions per exam will vary based on the amount of content represented on each exam.

Laboratory (practical) exams: Practical exams will take place in the dissection laboratory and will cover laboratory and lecture content leading up to the day of the exam. These exams will consist of a mix of question types that utilize tagged structures on human cadavers as a component of the question. These

can range from straightforward identification of a tagged structure to recognizing the structure/function relationship or clinical significance of a feature. Laboratory exams are NOT cumulative.

Team-based learning (TBL): There will be four TBL sessions where students are provided with a set of learning objectives must be completed prior to the session. At the start of the session, each student will take a brief test independently (individual readiness assurance test (iRAT)). This will get turned in as part of the grade for this activity. Next, students will gather with their assigned teams (gross anatomy tables) and take the exact same test as a team (team readiness assurance test (tRAT)). During this time, the team will discuss the questions and come to a consensus on their answers. Finally, there will be an application portion of the activity where cases/questions are presented and each team will work together to determine the correct answers. Each session is worth 2.5% of the final grade. Within each session, the iRAT will account for 40% of the score, and the tRAT and application cases will each account for 30% of the score.

Exam Question Assignments: Each student will be responsible for creating five multiple-choice (lecture-style) examination questions-one for each of the body regions that we cover in the course. Question must be submitted prior to the start of a new body region (due dates on canvas). Late submission will not be accepted. The best 2-3 questions will be included on a lecture examination.

Questions must be well thought out and accurate. For each submission, students must assign a cognitive level to the question using Bloom’s taxonomy, include a brief explanation as to why the keyed answer is correct and explanations indicating why each of the other answer options (called distractors) are incorrect. There should be one correct answer and 3-4 distractors. These question MUST be original (i.e., you must create them on your own, using class and/or legitimate outside resources). If you are caught plagiarizing, you will receive a zero for the entire activity and documentation will be submitted to the University/Medical Sciences Program indicating the offense.

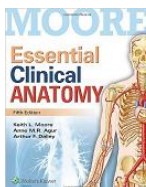
Grading

Grades will be assigned using the scale below. There is no curving of grades in this course.

A	89.50%–100%	B	76.50%–81.49%	C	66.50%–69.49%	D	54.50%–58.49%
A–	84.50%–89.49%	B–	73.50%–76.49%	C–	62.50%–66.49%	D–	50.00%–54.49%
B+	81.50%–84.49%	C+	69.50%–73.49%	D+	58.50%–62.49%	Fail	Below 50.00%

Each unexcused absence from a mandatory session will result in an automatic 2% reduction from the student’s final grade.

Textbook



Moore KL, Agur AMR, and Dalley AF (2015) *Essential Clinical Anatomy* (5e), Wolters Kluwer Health, Philadelphia.
ISBN: 9781451187496.

Note: The textbook is a supplemental resource in this course. All the testable content will come from lecture/lab. It is a good idea to purchase an anatomy textbook just so you have an additional reliable resource for information. We recommend the textbook listed above. Feel free to purchase earlier/cheaper editions- not much of the actual content has changed.

Thieme dissector: Electronic resource customized for the dissection laboratory of this course. Students will use the link below to create an account. An access code will be provided when the course begins.
<http://mycourse.thieme.com/Account/Login>

Academic Integrity Policy

The University Rules, including the Student Code of Conduct, and other documented policies of the department, college, and university related to academic integrity will be enforced. Any violation of these regulations, including acts of plagiarism or cheating, will be dealt with on an individual basis according to the severity of the misconduct.

Special Needs Policy

If you have any special needs related to your participation in this course, including identified visual impairment, hearing impairment, physical impairment, communication disorder, and/or specific learning disability that may influence your performance in this course, you should meet with the instructor to arrange for reasonable provisions to ensure an equitable opportunity to meet all the requirements of this course. At the discretion of the instructor, some accommodations may require prior approval by Disability Services.

Counseling Services

Students have access to counseling and mental health care through the University Health Services (UHS), which can provide both psychotherapy and psychiatric services. In addition, Counseling and Psychological Services (CAPS) can provide professional counseling upon request; students may receive five free counseling sessions through CAPS without insurance. Students are encouraged to seek assistance for anxiety, depression, trauma/assault, adjustment to college life, interpersonal/relational difficulty, sexuality, family conflict, grief and loss, disordered eating and body image, alcohol and substance abuse, anger management, identity development and issues related to diversity, concerns associated with sexual orientation and spirituality concerns, as well as any other issue of concerns. After hours, students may call UHS at 513-556-2564 or CAPS Cares at 513-556-0648. For urgent physician consultation after-hours students may call 513-584-7777.

Title IX

Title IX is a federal civil rights law that prohibits discrimination on the basis of your actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also covers sexual violence, dating or domestic violence, and stalking. If you disclose a Title IX issue to me, the course director, I am required to forward that information to the Title IX Office. They will follow up with you about how the University can take steps to address the impact on you and the community and make you aware of your rights and resources. Their priority is to make sure you are safe and successful here. You are not required to talk with the Title IX Office. If you would like to make a report of sex or gender-based discrimination, harassment or violence, or if you would like to know more about your rights and resources on campus, you can consult the website www.uc.edu/titleix or contact the office at 513-556-3349.

Human Anatomy Lecture and Laboratory Schedule

Unless otherwise noted (e.g., exams), days shaded in blue meet in the lecture room (MSB 5051), days shaded in grey meet in the anatomy laboratory (R800).

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1 8/23 – 8/27	23 (Thomp/Giffin) -Anatomic terminology and systems overview -Intro to imaging	24	25 (Thomp/Giffin) Introduction to the anatomy lab (Mandatory in-person attendance)	26 LABORATORY Intro to lab and dissection techniques	27
Week 2 8/30 – 9/3	30(Thompson) -Vertebral column osteology -Superficial and deep back muscles -Imaging of the spine	31	1 LABORATORY Superficial and deep back	2(Thompson) -Spinal cord, meninges and typical spinal nerve	3
Week 3 9/6 – 9/10	6 NO CLASS LABOR DAY	7	8 LABORATORY Spinal cord and Meninges	9 BACK/SPINAL CORD TBL	10
Week 4 9/13 – 9/17	13 Lecture exam 1 1:30 in lecture hall	14	15 Laboratory exam 1 R800	16 (Thompson) -Overview of thorax -Thoracic wall -Pleura/lungs	17

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 5 9/20 – 9/24	20 LABORATORY -Thoracic wall -Pleura -Lungs	21	22(Thompson) -Heart -Superior mediastinum	23 LABORATORY -Superior mediastinum -Heart -Posterior mediastinum (p)	24
Week 6 9/27 – 10/1	27 (Thompson) -Posterior mediastinum -Thorax imaging	28	29 THORAX TBL	30 (Giffin) -Overview of the abdomen -Abdominal wall	1
Week 7 10/4 – 10/8	4 LABORATORY -Anterior abdominal wall	5	6 (Giffin) -Foregut -Celiac trunk	7 LABORATORY -Foregut -Celiac trunk	8
Week 8 10/11 – 10/15	11 READING DAY No Class	12	13 (Giffin) -Midgut -Hindgut	14 LABORATORY -Midgut -Hindgut	15

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 9 10/18 – 10/22	18(Giffin) -Abdominal imaging and application	19	20 ABDOMEN TBL	21 Lecture exam 2 1:30 in lecture hall	22
Week 10 10/25 – 10/29	25 Lab exam 2 R800	26	27 (Giffin) -Introduction to limbs -Anterior thigh -Anterior and lateral leg	28 LABORATORY -Anterior thigh -Anterior leg	29
Week 11 11/1 – 11/5	1(Giffin) -Gluteal region -Posterior thigh -Hip joint	2	3 LABORATORY -Gluteal region -Hip joint (P)	4 (Giffin) -Popliteal fossa -Posterior leg -Knee joint	5
Week 12 11/8 – 11/12	8 LABORATORY -Popliteal fossa -Posterior leg -Lateral leg -Knee joint (P)	9	10 (Giffin) -Lower limb imaging and application	11 NO CLASS VETERANS DAY	12

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 13 11/15 – 11/19	15 (Thompson) -Anterior arm -Brachial plexus	16	17 (Thompson) -Cubital fossa -Anterior forearm -Elbow joint	18 LABORATORY -Anterior arm -Anterior forearm -Elbow joint (P)	19
Week 14 11/22 – 11/26	22 (Thompson) -Shoulder -Posterior arm -Shoulder joint	23	24 (Thompson) -Upper limb imaging and application	25 NO CLASS THANKSGIVING	26 THANKSGIVING
Week 15 11/29 – 12/3	29 LABORATORY -Shoulder -Posterior arm -Posterior forearm -Shoulder joint (P)	30	1 COMBINED LIMBS TBL	2 Ultrasound lab (1:25-3:15). Must complete pre-session module. More details will be sent out.	3
Week 16 12/6 – 12/10	6 Lecture exam 3 Time/date TBD	7	8 Lab exam 3 R800 (1:30-3:30)	9	10

P=prosection (the structure will already be dissected, you only need to study it)