

## COURSE SYLLABUS      ANAT 316: CLINICAL HUMAN VISCERAL ANATOMY

### General Information

**Course/Section #:** ANAT 316 - 001

**Term and Year:** Winter 2024

**Course Schedule:** Lectures: Tuesdays and Thursdays, 8:35 AM – 9:25 AM  
(Location: Leacock Building, Rm 26)  
Laboratory: Tuesdays 10:35 AM -12:25 PM (section 002)  
Fridays 9:25 AM -11:25 AM (section 003)  
(Location: Strathcona Anatomy and Dentistry Building, Rm 2/49)

**Number of credits:** 3 credits

### Instructor Information

**Course coordinator:** Dr. Mette Coleman, DSc., FAAOMPT., Faculty Lecturer

**E-mail:** [mette.coleman@mcgill.ca](mailto:mette.coleman@mcgill.ca)

**Office:** SADB, Rm 2/38A

**Office hours:** By appointment

**Communication plan:** 1. Class time, Lab time, and Office hours (by appointment)  
2. Discussion board via MyCourses  
3. Email for specific course inquiries (response time: 2–3 days)

**Co-instructor:** Dr. Mikaela Stiver, Ph.D., Assistant Professor

**Email:** [mikaela.stiver@mcgill.ca](mailto:mikaela.stiver@mcgill.ca)

**Office:** SADB, Rm 1/38

**Office hours:** By appointment

**Communication plan:** 1. Class time, Lab time, and Office hours (by appointment)  
2. Discussion board via MyCourses  
3. Email for specific course inquiries (response time: 2–3 days)

### Teaching Assistants (TA) Information

**Names:** Jeffrey Soufi, MD, CM (Tuesday labs) & Carol Wissa (Friday labs)

**E-mails:** [jeffrey.soufi@mail.mcgill.ca](mailto:jeffrey.soufi@mail.mcgill.ca) & [carol.wissa@mail.mcgill.ca](mailto:carol.wissa@mail.mcgill.ca)

**Communication plan:** 1. In-person anatomy laboratory time  
2. Discussion boards (via MyCourses)

### Course Overview

Anatomy & Cell Biology: The gross anatomy of the internal organ systems of the human body, with emphasis on those aspects of greatest relevance to physical and occupational therapists. Laboratories include the study of prepared donor-based specimens.

### Course Description

Clinical Human Visceral Anatomy (ANAT 316) is designed to provide students with detailed knowledge of the gross anatomy of the viscera of the human body. This course will use a regional approach to describe and discuss the structural and functional relationships of the visceral organs of the thorax, abdomen, pelvis, and head and neck regions of the human body. The neurovascular supply of the visceral systems will also be discussed. This course entails weekly lectures and laboratory components during which students will have the opportunity to study and explore the human body through cadaveric prosections and/or cadaveric images.

## Learning Outcomes

After completion of this course, students should be able to:

1. Comfortably use anatomical terminology to describe structural characteristics, specimen/image orientation, location, and functional relationships.
2. Outline and discuss the major visceral and neurovascular components of the thorax, including the heart, lungs, and structures of the mediastinum.
3. Discuss and describe the structure, components, and neurovasculature of the skull, the cranial nerves, and corresponding cranial foramina.
4. Discuss and describe the components, neurovasculature, and structural relationships of the face, nasal and oral cavities, pharynx, larynx, and neck.
5. Discuss and describe the muscular components and neurovascular supply of the anterior and posterior abdominal walls.
6. Discuss and describe the visceral components and neurovascular supply to the foregut, midgut, hindgut, and retroperitoneal regions.
7. Discuss and describe the skeletal, muscular, visceral, and neurovascular supply to the pelvis, as well as the urogenital and anal triangles.
8. Carry out problem-solving and critical thinking techniques to apply anatomical theory to common clinical implications.
9. Identify and describe all the above-mentioned structures on cadaveric specimens.
10. Demonstrate professional respect and responsible care of human specimens.

*Please refer to each lecture file for topic/content-specific learner objectives.*

## Instructional Method

**Lectures:** ANAT 316 will be delivered in person at the times and locations specified above. In-person lectures will be recorded and posted to MyCourses *after* the lectures. However, please make every effort to attend the lectures in person, as the recordings will not capture everything (e.g., demos and in-class polling). The quality and availability of lecture recordings captured by Lecture Recording Systems (LRS) are not guaranteed and should only be treated as a supplemental resource. Your active participation in the in-person lectures will ensure you gain the most comprehensive understanding of the course material.

**Laboratories:** All ANAT 316 laboratory sessions will be held in person in the anatomy laboratory (SADB Rm 2/49). In-person labs will **NOT** be recorded. Students are **REQUIRED** to attend only the lab section they have been assigned and respect their learning-group assignment. The expectation is that students actively participate during in-person laboratory sessions on a weekly basis; this requires that students prepare before coming to the lab. Labs will be carried out in small groups, and discussions will be facilitated by Undergraduate Course Assistants (UCAs) and Teaching Assistants (TAs).

**PLEASE NOTE:** The lab component is an integral part of this course; it is, therefore, essential for students to participate fully in both components of this course to understand the material and optimize success. Should a student be unable to participate in their weekly lab section indefinitely, they will not be able to complete the course. These students should consult with their student affairs advisor to discuss alternative solutions. Labs will involve the review of previously dissected material (known as prosections). Students are required to wear a lab coat, disposable gloves, closed-toe shoes, and safety glasses and always abide by the safety regulations of the Anatomy lab at all times. All students are expected to come to the lab prepared to work on the guided self-study activities during their assigned laboratory section.

**PLEASE NOTE:** All students must read and electronically sign off on the Code of Conduct Form via myCourses. Students will not be provided access to course content on MyCourses or the Anatomy lab without confirmation of their signing to the Anatomy Laboratory Code of Conduct. We do not need to be informed of occasional absences from lectures or labs. There will be no make-up labs. You are responsible for catching up on lecture/lab content you may have missed.

It is also the expectation that students conduct themselves professionally and respectfully. The University recognizes the importance of maintaining teaching spaces that are respectful and inclusive for all involved. To this end, offensive, violent, disrespectful, or harmful language in our learning environments will not be tolerated.

### Technologies We Will Use:

- [MyCourses](#) – course content, important documents, discussion board
- Zoom web conferencing tool – for lecture 1a and occasionally for optional review sessions. Information for students can be found [here](#).
- Online polling platforms: We may occasionally use free web-based polling systems to assess students' learning and encourage classroom participation. This participation is not graded but will help give you an idea of the types of questions on this course's exams. We will primarily use [SLIDO](#) and [Kahoot](#), though we may also occasionally use complementary platforms.

### Required/Recommended Course Materials

**Textbook Resources:** These resources are **not required**. The instructor's recommendations are below. Students are encouraged to purchase a textbook that suits their study needs and habits.

- Gilroy, Anatomy an Essential Textbook, Second Edition, Thieme, New York, 2013 (**Highly Recommended**)
- Gilroy, Atlas of Anatomy, Third Edition, Thieme, New York, 2016 (**Recommended**)
- Rohen, J.W., Yokochi, C., Lutjen-Dreoll, E. (2015). Anatomy: A Photographic Atlas, 9th ed. Lippincott Williams & Wilkins. (**Highly Recommended**) (eBook available through McGill Libraries)

Textbooks have been put on reserve at McGill libraries; earlier versions of these textbooks are adequate. Other texts, such as *Netter's Atlas and Moore's Clinical Anatomy*, are also sufficient for this course (eBook versions are available through McGill Library).

The McGill Library provides online access to course materials via its [Course Readings](#) service and can link to online materials, including e-books and journal articles. Your [Liaison Librarian](#) can support you in accessing online materials in the library collection, purchasing online versions of your print course materials where possible, and troubleshooting issues with online Library resources. Consult the [Library's Services for Teaching](#) for more information.

**Other materials to acquire:** To participate in in-person anatomy laboratory sessions, students are REQUIRED to bring the following items, many of which can be purchased at the University Bookstore:

1. A lab coat (preferably knee length)
2. Ocular protection (safety glasses or face shield)
3. Close-toed shoes
4. Disposable gloves (buy a box or two for the semester; you may use multiple pairs per lab and can share a box among several students)
5. Combination/key lock – as your bags/belongings are not permitted inside the anatomy laboratory; you can store them in lockers in the Strathcona building.

### Learner Assessment/Evaluation

Students will **NOT** be allowed to write exams prior to the scheduled date. The final exams will be cumulative. The midterm and final exams will include both lecture and lab material. For ALL course assessments, those in-term and those in the final exam period, students are NOT permitted to (1) work together (all work is individual), (2) access outside resources on the web or their devices, and (3) share, circulate or distribute assessment questions, etc. See the statement on academic integrity at the end of this syllabus.

ASSESSMENT	ASSESSMENT DETAIL & DEADLINES	% OF FINAL GRADE
Midterm	February 21, 6:30 PM – 8 PM. Content: Lectures 1-12	25%
Lab Quizzes (online)	Quiz 1: Content: Labs 1-3, available Feb 5 (5 pm-11 pm) Quiz 2: Content: Labs 4+5, available Feb 19 (5 pm-11 pm) Quiz 3: Content: Labs 6+7, available March 11 (5 pm-11 pm) Quiz 4: Content: Labs 8+9, available March 25 (5 pm-11 pm) Quiz 5: Content: Lab 10+11, available April 8 (5 pm-11 pm)	15% (3.75% each, with the lowest quiz mark dropped)
Final Lab Exam	Time/place: TBD (Winter exam period) Content: Cumulative – all laboratory content	20%
Final Exam	Time/place: TBD (Winter exam period) Content: Cumulative, but emphasis on lectures 13-26	40%

The passing grade in the Faculty of Medicine and Health Sciences and Faculty of Education is 55%.

**Information concerning Online Lab Quizzes:** The five lab quizzes during the semester will be completed online via MyCourses, of which *only your four best quiz marks* will contribute to the final weight of this component of the course evaluation (the lowest quiz mark will be dropped). Each online lab quiz will consist of 10 images of anatomical specimens with 2 short-answer questions per specimen (20 points total) relating to the lab content covered in each, as described above (i.e., lab quizzes are non-cumulative). All online quizzes will begin at 5 pm and end at 11 pm on the specified dates above (single attempt, duration 15 minutes). These assessments in MyCourses are to be completed on your own, without access to outside resources. You will be asked to sign an academic integrity statement before gaining access to the quizzes.

The quizzes will be TIMED (15 minutes) and FORWARD ONLY assessments, meaning that you will NOT be able to revisit completed/submitted questions. This format was chosen to closely model the bell-ringer style of assessment students complete in the anatomy lab during the exam period.

## **Department of Anatomy and Cell Biology Policy Statements**

### Department Policy on Midterm Exam/In-Course Assessment Deferrals

A midterm exam or other in-course assessment (i.e., quiz, assignment, paper, etc.) in a course administered by the Department of Anatomy & Cell Biology may only be deferred in the case of a justified absence due to serious illness or significant extenuating circumstances AND when valid documentation is received by the Course Coordinator within FIVE working days of the original midterm exam or due date.

If the deferral request is accepted by the Course Coordinator, students may be offered one or both accommodations below, depending on the grading structure of the course:

- (a) Add the weight of the in-course assessment to another course component.
- (b) Write a deferred midterm exam/submit a deferred assessment, which will be scheduled/due within ten days of the original midterm exam/due date.

MIDTERM EXAM: If choosing the following above option...

- (a) The weight of the midterm will be added to the final exam (25% + 40% = 65%)
- (b) A deferred midterm will be written in the week immediately following the original midterm date.

LAB QUIZZES: Students will only be able to add the weight of a deferred lab quiz to the remaining lab quizzes equally. If all five lab quizzes are deferred, the weighting will be added to the weight of the Final Lab Exam. Writing a lab quiz outside of the provided timeframe will not be permitted.

### Grading Policy for the Department of Anatomy & Cell Biology

The Department of Anatomy & Cell Biology will NOT revise/upgrade marks except on sound academic grounds. Once computed, the marks in this course will NOT be altered/increased arbitrarily. Decimal points will be “rounded off” as follows: if the final aggregate mark is computed to be 79.5%, the mark will be reported as 80% (an A-); a final aggregate mark of 79.4% will be reported as 79% (a B+). These marks are FINAL and non-negotiable.

Please see the full policy, including information on valid documentation requirements, here:

<https://mcgill.ca/anatomy/undergraduate/policies-resources>

### University Policy on Reassessments and Rereads

Please see the eCalendar for policies regarding reassessments of coursework and rereads of final exams:

[www.mcgill.ca/study/university\\_regulations\\_and\\_resources/undergraduate/gi\\_final\\_examinations](http://www.mcgill.ca/study/university_regulations_and_resources/undergraduate/gi_final_examinations)

## McGill Policy Statements

### Language of Submission

In accord with McGill University's [Charter of Students' Rights](#), students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives. (Approved by Senate on 21 January 2009)

Note: In courses in which acquiring proficiency in a language is one of the objectives, the assessments shall be in the language of the course.

Conformément à la [Charte des droits de l'étudiant](#) de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue).

### Academic Integrity

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism, and other academic offences under the [Code of Student Conduct and Disciplinary Procedures](#) (see [McGill's guide to academic honesty](#) for more information). (Approved by Senate on 29 January 2003).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon [le Code de conduite de l'étudiant et des procédures disciplinaires](#) (pour de plus amples renseignements, veuillez consulter [le guide pour l'honnêteté académique de McGill](#)).

### Additional Statements:

- The [University Student Assessment Policy](#) exists to ensure fair and equitable academic assessment for all students and to protect students from excessive workloads. All students and instructors are encouraged to review this Policy, which addresses multiple aspects and methods of student assessment, e.g., the timing of evaluation due dates and weighting of final examinations.
- Note that to support academic integrity, your assignments may be submitted to text-matching or other appropriate software (e.g., formula-, equation-, and graph-matching).
- Copyright: Instructor-generated course materials (e.g., handouts, slide decks, exam questions) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. This includes posting such material to third-party websites such as StuDocu, Course Hero, and others. Note that infringements of copyright can be subject to follow-up by the University under the Code of Student Conduct and Disciplinary Procedures.
- As the instructor of this course, I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with the Office for Student Accessibility and Achievement: 514-398-6009.
- Many students may face mental health challenges that can impact not only their academic success but also their ability to thrive in our campus community. Please reach out for support when you need it; many [resources](#) are available on-campus, off-campus, and online.

- McGill University is on land that has long served as a site of meeting and exchange amongst Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. We acknowledge and thank the diverse Indigenous people whose footsteps have marked this territory on which peoples of the world now gather.

L'Université McGill est sur un emplacement qui a longtemps servi de lieu de rencontre et d'échange entre les peuples autochtones, y compris les nations Haudenosaunee et Anishinabeg. Nous reconnaissons et remercions les divers peuples autochtones dont les pas ont marqué ce territoire sur lequel les peuples du monde entier se réunissent maintenant.

- Content warning: Please be aware that some of the course content may be disturbing for some students. It has been included in the course because it directly relates to the learning outcomes. Please contact the instructor if you have specific concerns about this.
- **End-of-course evaluations** are one of the ways that McGill works towards maintaining and improving the quality of courses and the student's learning experience. You will be notified by e-mail when the evaluations are available. Please note that a minimum number of responses must be received for results to be available to students.
- In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.
- Additional policies governing academic issues that affect students can be found in the McGill Charter of Students' Rights (see [document](#)).
- McGill has policies on sustainability, paper use, and other initiatives to promote a culture of sustainability at McGill. (See the [Office of Sustainability](#).)
- Learning support resources: Consult resources from [Teaching and Learning Services](#) (TLS) on topics such as time management, study strategies, group work, exam prep, and more. TLS also offers opportunities to connect with an academic peer mentor through [Stay on Track](#) and to attend workshops. For further individualized support, check out the programs and resources from [Student Accessibility & Achievement](#).
- Guidelines for the use of mobile computing and communications (MC2) devices in classes at McGill have been approved by the APC. Consult the [Guidelines](#) for a range of sample wording that may be used or adapted by instructors on their course outlines.

**This syllabus is an important document and should be saved for future reference. It may be needed for credit transfer, employment, certification, or licensing purposes.**

## ANAT 316 Winter 2024

Date	Lecture #	Topic	Instructor
1/4/24	1	Welcome to ANAT 316	Coleman/Stiver
<i>Zoom Lecture 1a: Intro to the Autonomic Nervous System (1/5 and 1/9) Dr. Stiver</i>			
1/9/24	2	Lungs and Tracheobronchial Tree	Coleman
1/11/24	3	Pericardium and Coronary Circulation	Coleman
<i>Lab 1: Lungs and Tracheobronchial Tree (1/12 and 1/16) Dr. Coleman</i>			
1/16/24	4	Internal Heart	Coleman
1/18/24	5	Mediastinum	Coleman
<i>Lab 2: The Heart (1/19 and 1/23) Dr. Coleman</i>			
1/23/24	6	Skull	Stiver
1/25/24	7	Cranial Nerves (Part I)	Stiver
<i>Lab 3: Mediastinum (1/26 and 1/30) Dr. Coleman</i>			
1/30/24	8	Cranial Nerves (Part II)	Stiver
2/1/24	9	Face	Coleman
Lab quiz #1 (covers labs 1-3) - open on 2/5 from 5 pm – 11:59 pm			
<i>Lab 4: Skull, Foramina, and Cranial Nerves (2/2 and 2/6) Dr. Stiver</i>			
2/6/24	10	Nasal cavities and sinuses	Coleman
2/8/24	11	Oral cavity, salivation, and palates	Stiver
<i>Lab 5: Face and Nasal Cavities (2/9 and 2/13) Dr. Coleman</i>			
2/13/24	12	Mastication	Stiver
2/15/24	13	Pharynx & larynx	Coleman
Lab quiz #2 (covers labs 4+5) - open on 2/19 from 5 pm – 11:59 pm			
<i>Lab 6: Oral Cavities and Muscles of Mastication (2/16 and 2/20) Dr. Stiver</i>			
2/20/24	14	Neck	Coleman
<b>2/21/24 - MIDTERM (up to and including Lecture 12)</b>			
2/22/24	15	Intro to Abdomen (incl. Anterior Abd. Wall)	Stiver
2/27/24	16	Foregut	Stiver
<i>Lab 7: Neck, Pharynx, and Larynx (2/23 and 2/27) Dr. Coleman</i>			
2/29/24	17	Midgut & Hindgut	Stiver
<b>READING WEEK 3/4 - 3/8/24</b>			
Lab quiz #3 (covers labs 4+5) - open on 3/11 from 5 pm – 11:59 pm			
<i>Lab 8: Anterior Abdomen and Foregut (3/1 and 3/12) Dr. Stiver</i>			
3/12/24	18	Posterior Abdomen & Vasculature	Stiver
3/14/24	19	Innervation of Abdominal Viscera	Stiver
<i>Lab 9: Mid/hindgut and Posterior Abd. and vasculature (3/15 and 3/19) Dr. Stiver</i>			
3/19/24	20	Intro to Pelvis: Pelvic Floor	Coleman
3/21/24	21	Testicular Reproductive System	Coleman
Lab quiz #4 (covers labs 8+9) - open on 3/25 from 5 pm – 11:59 pm			
<i>Lab 10: Pelvis: pelvic floor and viscera (3/22 and 3/26) Dr. Coleman</i>			
3/26/24	22	Ovarian Reproductive System	Coleman
3/28/24	23	Perineum: Urogenital and Anal Triangles	Coleman
<i>Lab 11: Urinary and Reproductive Viscera (4/2 and 4/5) Dr. Coleman</i>			
4/2/24	24	Neurovasculature of Pelvic Viscera	Coleman
4/4/24	25	Review	Coleman/Stiver
Lab quiz #5 (covers labs 10+11) - open on 4/8 from 5 pm – 11:59 pm			
<i>Lab 12: Perineum and Neurovasculature of pelvis (4/9 and 4/12) Dr. Coleman</i>			
4/9/24	26	Kahoot Review	Coleman/Stiver