

## COURSE SYLLABUS:



### ANAT 316: CLINICAL HUMAN VISCERAL ANATOMY

#### General Information

Course and Section #:	ANAT 316 - 001
Term and Year:	Winter 2023
Course schedule:	- <b>Lectures:</b> Tu/Th; 11:35am – 12:25pm (Location: MacDonald Harrington G-10) - <b>Laboratory:</b> Fri (section 003) 9:35-11:25am and Mon (section 002); 9:35-11:25am (Location: SADB rm 2/49)
Number of credits	3 credits

#### Instructor Information

Name and Title:	Dr. Campbell Rolian (PhD), Associate Professor
E-mail:	<a href="mailto:campbell.rolian@mcgill.ca">campbell.rolian@mcgill.ca</a>
Office:	SADB rm: 1/35A
Office hours:	By appointment – email available days and times during the week.
Communication plan:	1. Class time, Lab time and Office hours (by appointment) 2. Discussion board via MyCourses 3. E-mail for specific course inquiries ( <b>anticipated response time: 2-3 days</b> )

#### TA Information

Name:	Gabrielle Belloir (Friday labs) & Carol Wissa (Monday labs)
E-mail:	<a href="mailto:gabrielle.belloir@mcgill.ca">gabrielle.belloir@mcgill.ca</a> & <a href="mailto:carol.wissa@mcgill.ca">carol.wissa@mcgill.ca</a>
Communication plan:	1. Anatomy labs 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 ('prosections').

#### 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 lecture 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 their 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 above mentioned structures on cadaveric specimens.
10. Demonstrate professional respect and responsible care of human specimens.

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

## Instructional Method

**Lectures:** ANAT316 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 lectures in person, as the recordings will not capture everything (e.g., demos)

**Laboratories:** All ANAT316 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 to which they have been assigned. The expectation is that students actively participate during in-person laboratory sessions on a weekly basis; this requires that students prepare before coming to lab. Labs will be carried out in a small groups and discussions will be facilitated by Undergraduate Course Assistants (UCAs) and Teaching Assistants (TAs). It is also the expectation that students conduct themselves in a **professional and respectful** manner. 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.

**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 in order to understand the material and to 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. Students are required to wear personal protective equipment (lab coat, gloves, closed toe shoes and safety glasses), and to abide by the safety regulations of the Anatomy lab, at all times. 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, nor to the Anatomy lab, without confirmation of their signing to the Anatomy Laboratory Code of Conduct. **There will be no make-up labs. It is your responsibility to catch up on lecture/lab content you may have missed.**

## COVID contingency plan

We will continue to follow the guidelines and instructions from McGill University related to the ongoing COVID pandemic. In the event that an outbreak leads to a university closure, we will shift to an online format for lectures and/or labs. More instructions will be provided at that time, please check myCourses and your email regularly for any relevant course updates.

## COVID-related protocols

- If you are experiencing COVID-compatible symptoms, have tested positive for COVID, or have been in contact with an individual who has tested positive for COVID, please **stay home**, and follow public health directives concerning isolation/quarantine.
- Masks are **strongly encouraged** in all learning environments, and are **MANDATORY** in the Anatomy Lab. Outside of the lab, please respect individuals' personal choice regarding the use of masks.

## Technologies We Will Use:

- [myCourses](#) – course content, important documents, discussion board
- Zoom web conferencing tool – lectures and/or labs in the event of a COVID outbreak, and occasionally for optional review sessions. Information for students can be found [here](#).
- Online polling platforms: We will (try to) use free web-based polling systems occasionally, 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 found on this course's exams. We will primarily use Slido, though we may also occasionally use complementary platforms such as TopHat. More details to follow.

## 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/optional)
- Rohen, J.W., Yokochi, C., Lutjen-Dreoll, E. (2015). Anatomy: A Photographic Atlas, 9th ed. Lippincott Williams & Wilkins. (**Highly Recommended**)

Textbooks have been put on reserve at the 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.

The Library provides online access to course materials in its [Course Reserves](#) system. The Library links to online materials (both e-books and e-journal articles.)

## Other materials to acquire:

To participate in in-person anatomy laboratory sessions, students **ARE REQUIRED** to bring with them the following list of items, many of which can be purchased at the University Bookstore.

1. a lab coat (preferably knee length)
2. ocular protection (safety glasses or a face shield)
3. gloves (purchase a box or two, you may use multiple pairs per lab, can also share box)
4. close-toed shoes
5. combination/key lock – as your personal 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 on their devices and (3) share, circulate or distribute assessment questions, etc. See statement on academic integrity at the end of this syllabus.

ASSESSMENT	ASSESSMENT DETAIL & DEADLINES	% OF FINAL GRADE
Midterm	February 22, time and place TBD (evening). Included content: Lectures 1-13	25%
Lab Quizzes (online)	Quiz 1 → Content: labs 1-4; available from Feb 7 (4pm) to Feb 9 (11:59pm) Quiz 2 → Content: labs 5-8; available from March 14 (4pm) to March 16 (11:59pm) Quiz 3 → Content: labs 9-11; available from Apr 4 (4pm) to Apr 6 (11:59pm)	10% (5% each, with lowest quiz mark dropped)
Final Lab Exam	Time/place: TBD (Winter exam period) Content: Cumulative – all laboratory content	25%
Final Exam	Time/place: TBD (Winter exam period) Content: Cumulative, but emphasis on lectures 15-26	40%

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

#### Department of Anatomy & Cell Biology Midterm Exam/In-Course Assessment Deferral Policy

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 of the accommodations below, depending on the grading structure of the course:

- Add the weight of the in-course assessment to another course component
- Write a deferred midterm exam/submit a deferred assessment which will be scheduled/due within 10 days of the original midterm exam/due date

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

- The weight of the midterm will be added to the final exam (25% + 40% = 65%)
- 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 three 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**.

**Information concerning Lab Quizzes:** The three lab quizzes during the semester will be completed online via myCourses, and each 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 4pm and end at 12:00am on the specified dates above (56-hour window, 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. There will be three online quizzes, of which **only your two best quiz marks will contribute to the final weight of this component of the course evaluation**.

### 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 which 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 which 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](#).)
- 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.**

Date	Lecture #	Topic
5/1/23	1	Welcome to ANAT 316
10/1/23	2	Intro to autonomic nervous system
12/1/23	3	Lungs and tracheobronchial tree
<i>Lab 1: Lungs and tracheobronchial tree (13/1 and 16/1)</i>		
17/1/23	4	Pericardium and coronary circulation
19/1/23	5	Internal heart anatomy
<i>Lab 2: The heart (20/1 and 23/1)</i>		
24/1/23	6	Mediastinum
26/1/23	7	Skull
<i>Lab 3: Mediastinum (27/1 and 30/1)</i>		
31/1/23	8	Cranial nerves pt. 1
2/2/23	9	Cranial nerves pt. 2
<i>Lab 4: Skull and Cranial nerves (3/2 and 6/2)</i>		
7/2/23	10	Face
9/2/23	11	Nasal cavities and sinuses
Lab quiz #1 (covers labs 1-4) – open from 7/2/23 4pm to 9/2/23 11:59pm		
<i>Lab 5: Face and nasal cavities (10/2 and 13/2)</i>		
14/2/23	12	Oral cavity, salivation, and palates
16/2/23	13	Mastication
<i>Lab 6: Oral cavity and muscles of mastication (17/2 and 20/2)</i>		
21/2/23	14	Pharynx and larynx
22/2/23	Midterm (up to and including Lectures 1-13) – time/location TBD	
23/2/23	15	Neck
<i>Lab 7: Pharynx and larynx (24/2 and 6/3)</i>		
7/3/23	16	Intro to abdomen
9/3/23	17	Foregut
<i>Lab 8: anterior abdomen and foregut (10/3 and 13/3)</i>		
14/3/23	18	Midgut and hindgut
16/3/23	19	Posterior abdomen and abdominal vasculature
Lab quiz #2 (covers labs 5-8) – open from 14/3/23 4pm to 16/3/23 11:59pm		
<i>Lab 9: Midgut, hindgut, and posterior abdomen (17/3 and 20/3)</i>		
21/3/23	20	Innervation of the abdominal viscera
23/3/23	21	Pelvic floor and viscera
<i>Lab 10: Pelvic floor and viscera (24/3 and 27/3)</i>		
28/3/23	22	Sex-specific pelvic viscera
30/3/23	23	Neurovasculature of the pelvic viscera
<i>Lab 11: Sex-specific pelvic viscera and neurovasculature (31/3 and 3/4)</i>		
4/4/23	24	Urogenital triangle
6/4/23	25	Anal triangle
Lab quiz #3 (covers labs 9-11) – open from 4/4/23 4pm to 6/4/23 11:59pm		
11/4/23	26	Review
12/4/23	<i>Lab 12 - Section 002 (Monday Labs) Urogenital and anal triangles</i>	
13/4/23	<i>Lab 12 - Section 003 (Friday Labs) Urogenital and anal triangles</i>	