



Course Syllabus:

ADVANCED HUMAN ANATOMY LABORATORY

ANAT 514 (001) – WINTER 2024

Credit value: 3.0

Course Coordinator:	Dr. Gabriel Venne, DO, PhD Associate Professor Office : SADB rm 1/33 E-mail: gabriel.venne@mcgill.ca Office hours: By appointment
Teaching Assistants	Cat Wang E-mail: cat.wang@mail.mcgill.ca
Co-Instructor	Dr. Campbell Rolian Associate Professor Office : SADB rm 1/35 E-mail : campbell.rolian@mcgill.ca
Co-Instructor	Dr. Mikaela Stiver Assistant Professor Office: SADB rm 1/38 E-mail : mikaela.stiver@mcgill.ca
Co-Instructor	Dr. Mette Coleman Faculty Lecturer Office: SADB rm 1/38 E-mail : mette.coleman@mcgill.ca
Lecture	Room: SADB rm M48 Time: Tuesday, 9:35am – 10:25pm
Laboratory	Room: Anatomy lab: SADB 2/49, Media Lab: 1/37 Time: Monday/Wed, 9:35am – 11:25am

COURSE DESCRIPTION

Advanced Human Anatomy Laboratory (ANAT 514) provides upper-year students with the opportunity to expand their study of human anatomy through regional dissection-based projects, and to develop skills to prepare them for graduate work and teaching in the anatomical sciences. Students will work in small groups to build upon anatomical knowledge learned in previous courses and integrate it with clinical- and research-based concepts. Self-directed and small-group study of functional and spatial anatomical relationships will be used to explore the organization of the human body. Students will develop non-traditional discipline-independent skills by working intensively alongside their peers, anatomy faculty, and laboratory staff. Students will also contribute directly to the sustainability of the human anatomy program at McGill through the creation of laboratory-based teaching resources, and gain teaching experience through the presentation and use of these resources within the program.

LEARNER OBJECTIVES

After the completion of this course, a successful student will be able to:

1. Demonstrate and maintain professionalism in both the class and lab, as well as exhibit respectful and responsible care of specimens and human tissue in the anatomy laboratory.
2. Exhibit a detailed understanding of human anatomy and describe the spatial and functional relationships between anatomical structures.
3. Use manual dissection skills to create educational resources that can be used to support teaching in cadaver-based human anatomy laboratories.
4. Demonstrate technical skills with various software related to the design and creation of educational resources.
5. Confidently teach human anatomy concepts using new and innovative educational resources and approaches.
6. Critically evaluate and communicate clinical- and research-based applications of human anatomy.
7. Apply oral communication skills to facilitate scientific discussions with responsiveness and adaptability.
8. Work actively in small team-based learning groups and engage in constructive discussions to successfully manage independent study projects.

INSTRUCTIONAL MATERIALS AND METHODS

Lectures: Tuesday, 9:35am – 10:25pm; SADB room M48

Laboratory: Monday and Wednesday, 9:35am – 11:25am; SADB Room 2/49 (dissection), 1/37 (media lab)

To complement the course objectives, several guest-lecturers will be scheduled during the lecture times throughout the semester. These will focus on applications of anatomy within and beyond academia, as well as those related to clinical concepts and teaching. Lecture times will also be used to instruct students on advanced concepts in human anatomy, innovation approaches for the creation of educational content, and student presentations. However, students are responsible to learn the anatomy content required to complete their dissection-based projects through independent study. The scheduled laboratory hours offer protected time for students to complete their regional dissections and work on the creation of their supplemental educational resources. Specific laboratory activities will vary between students based on the anatomical region(s) and supplemental resource(s) to which they have been assigned. The following resources have been set aside by the course coordinators to support learners with the course content:

Course materials: Supporting resources and instructional material on university-level teaching theory and practice (posted in myCourses – ANAT 514: <https://mycourses2.mcgill.ca/>)

Laboratory materials: Instructional and supporting material for the creation of educational resources and cadaveric dissection (posted in myCourses – ANAT 514: <https://mycourses2.mcgill.ca/>)

Additional materials: As required (posted in myCourses – ANAT 514: <https://mycourses2.mcgill.ca/>)

Students will be required to purchase the following materials for access to the anatomy laboratory:

- Lab coat
- Gloves
- Safety glasses or face shield

The items above can be purchased through the McGill University Bookstore.

Laboratory sessions will be centered upon the use of cadaveric specimens. **Students are required to wear a lab coat, gloves, closed-toe shoes, and safety glasses while in the laboratory and always abide by the safety rules and regulations of the Anatomy Laboratory.** It is expected that all students come to the laboratory prepared to work on the self-study activities. **All students must read and sign the Anatomy Laboratory Code of Conduct form online via myCourses.** Students will not be provided access to the laboratory or related course content on myCourses, without confirmation of their signing to the Anatomy Laboratory Code of Conduct.

Textbook Resources: The course coordinator's recommendations are below. These resources are not required – students are encouraged to purchase whichever resources suit their study needs and habits.

- **Detton AJ (2016) Grant's Dissector, 16th Ed., Wolters Kluwer, Philadelphia, Pennsylvania.**
- **Loukas M (2019) Gray's Clinical Photographic Dissector of the Human Body, Elsevier, Philadelphia, Pennsylvania.**
- Gilroy AM (2017) Anatomy – An Essential Textbook, 2nd Ed., Thieme, New York.
- Gilroy AM (2016) Atlas of Anatomy, 3rd Ed., Thieme, New York.
- Rohen JW et al. (2016) Anatomy: A Photographic Atlas, 8th Ed., Wolters Kluwer, Germany.

Earlier versions of these textbooks are adequate. Other texts such as Netter's Atlas, Moore's Essential Clinical Anatomy, and Grant's Atlas of Anatomy are also sufficient for this course. A list of additional online resources is available on MyCourses. Additional textbooks and other resources may be required to assist in the completion of a student's specific dissection and/or educational resource. Any additional textbooks or resources should be purchased at the discretion of each individual student.

COURSE OVERVIEW (subject to change)

Week	Date	Labs (SADB 2/49 or 1/37) Monday and Wednesday: 9h35-11h25	Assignments	Lectures (SADB M48) Tuesday: 9h35-10h25	
1	1 – 5	None			
2	JANUARY	8 – 12	In-lab introduction	Choices of Region (Jan. 9) Course Introduction Gab and Cat	
3		15 – 19	Project planning	Project Plan (Jan. 19) Body Donation Program Joseph Dubé	
4		22 – 26	Dissection, resource	Embalming Gab	
5		29 – 2	Dissection, resource	Fascial Anatomy Gab	
6	FEBRUARY	5 – 9	Dissection, resource	Game-Based Learning Mikaela Stiver	
7		12 – 16	Dissection, resource	Comparative Anatomy Campbell Rolian	
8		19 – 23	Dissection, resource	Anatomy grad school Sydney Hayden	
9	MARCH	26 – 1	Dissection, resource	Anatomical Education Ethan Bazos	
-		4 – 8	STUDY BREAK		
10		11 – 15	Dissection, resource	Progress Meeting 2 Teaching: Theory and Practice Cat and Sean	
11		18 – 22	Dissection, resource	Adjusting the Brain Patrick Freud	
12	25 – 29	Dissection, resource	Clinical and Surface Anatomy Gab		
13	APRIL	1 – 5	NO lab on Monday: Easter Presentation prep,	Closing Discussion Joseph and al.	
14		8 – 12	Lab presentations	Lab Presentation Journal club	

METHODS OF LEARNER ASSESSMENT AND EVALUATION

<u>Project Plan</u>	10%	January 19, 2024
<u>Progress</u>	10%	
Meeting One	5%	February 5 or 7, 2024
Meeting Two	5%	March 11 or March 13, 2024
<u>Final Quality</u>	30%	Week of April 8, 2024
Prosection	15%	
Teaching Resource	15%	
<u>Presentations</u>	15%	Week of April 8, 2024
Lab Presentation	15%	
<u>Examination</u>	15%	During Final Exam Period – TBD
Oral - Lab Practical Exam	15%	
<u>Journal Club</u>	10%	Week of April 8, 2024
<u>Professionalism</u>	10%	
Total:	100%	

ASSESSMENT BREAKDOWN

Project Planning: Before starting their laboratory work, students must compose a detailed project plan relevant to both the prosection component and the development of a related teaching resource (i.e., workbook, video, 3D-printed model, etc.). This will include a general description of both project components, the relevant stages and steps of all processes, a thorough consideration of the important structures to identify, and a projected timeline. This assignment will serve as an initial formative assessment upon which students can build toward a comprehensive final product. Grading will be based on the depth, organization, creativity, and feasibility of the students' project plans.

Progress Meetings: Formative assessments are fundamental in this course. Students will meet with the course instructor two times throughout the semester to present their progress on their prosection(s) and the development of their teaching resource(s), yielding constructive feedback toward the completion of their project. Students will be graded on the quality and quantity of their progress and planning of next steps.

Final Quality: The quality of the final prosection(s) and teaching resource(s) created will be evaluated by the course instructor, teaching assistants, and another designated anatomy staff members. The prosection(s) and resource(s) will be evaluated based on their completion, precision, design, cohesion to one another, and adherence to the proposed plan and timeline. The evaluation rubric will be available to students once the Project Planning assignment has been approved by the course coordinator.

Presentations: Students will have to create one 15-20 minutes anatomy lab station (5 minutes per person) using their final prosection(s) and, if applicable, their teaching resource(s) to teach their peers, the course instructor, teaching assistants, and other designated anatomy staff members. Students will be evaluated on the depth, accuracy, organization, teaching effectiveness, respect of time, and overall quality of their presentations. A portion of the grade will also incorporate the correctness of their responses to follow-up questions asked during and after the presentations. The evaluation rubric will be available to students once the Project Planning assignment has been accepted by the course coordinator(s).

Examination: An oral anatomy lab examination will be conducted to test your depth of knowledge and detailed understanding of human anatomy as well as the spatial and functional relationships between anatomical structures. This 10-minute oral exam will be led by the course instructor, teaching assistants, and/or another designated anatomy staff member.

Journal Club: The objective of the journal club is: to teach and develop critical appraisal skills, increase exposure to literature related to anatomy and facilitate better knowledge and literature awareness through group discussion with peers. Students will have to select a paper from a pre-selected bank, present it in a 3-minute elevator pitch format, give their opinion on the paper for 2 minutes and engage in conversation with the group for 3 minutes.

Professionalism: A professional attitude and behavior are key as you progress in your career. Professionalism will be evaluated based on class attendance, participation, respectful behavior, adherence to the code of conduct, communication with peers and staff, teamwork, a positive attitude toward learning, and time management, among other factors.

DEPARTMENTAL MIDTERM EXAM/IN-COURSE ASSESSMENT DEFERRAL POLICY

An in-course assessment (i.e., quiz, assignment, paper, etc.) in a course administered by the Department of Anatomy and 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(s) within **FIVE working days** of the original evaluation. If the deferral request is accepted by the course coordinator, students may be offered one of the accommodations below:

- a) Postpone the assessment to a later date set by the course coordinator(s)
- b) Add the weight of the missed assignment to an equivalent assessment (i.e., progress meetings one and two, lab presentation and/or oral presentation)

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

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

DEPARTMENTAL GRADING POLICY

The Department of Anatomy and Cell Biology will **NOT** revise or upgrade marks except on sound academic grounds. Once computed, the marks in this course will **NOT** be altered or 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**.

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

MCGILL POLICY STATEMENTS

1. 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](#).” (Approved by Senate on 29 January 2003) (See McGill’s [guide to academic honesty](#) for more information.)

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](#)).

2. In accord with McGill University’s [Charter of Student 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)

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.

3. © Instructor-generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) are **protected by law** and may not be copied or distributed in any form or in any medium without explicit permission of the course coordinators. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

4. 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

5. As the coordinator of this course, I endeavor to provide an inclusive learning environment. As such, if you experience barriers to learning in this course, do not hesitate to discuss them with me or Student Accessibility & Achievement office (formerly OSD).

Student Accessibility and Achievement Office (SAA)

1010 Sherbrooke Street West, Suite 410,

Phone: 514-398-6009 E-mail: access.achieve@mcgill.ca

Website: <https://www.mcgill.ca/access-achieve/>

6. In the event of extraordinary circumstances beyond the University’s control, the content and/or evaluation scheme in this course is subject to change.

7. Additional policies governing academic issues which affect students can be found in the McGill Charter of Students’ Rights: [McGill Charter of Student’s Rights](#) / [University Policies and Regulations](#) / [Policies on Student Rights and Responsibilities](#)

The departmental policies apply to all students, regardless of their program.

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.