

ANATCELL 9560, 2022-23

Human Anatomy & Embryology

Course Outline

1. Course Description:

A study of human anatomy and embryology for MSc Clinical Anatomy, MSc Pathology Assistant & PhD students. The course consists of dissection and tutorials in gross anatomy, as well as tutorials in embryology. Students should expect to spend at least 6 h per week in the lab and up to 4 h per week in tutorials.

2. Course Objectives:

By the end of the 9560 course the student will be able to:

1. Describe the normal gross and developmental anatomy of all the major body regions and systems according to their identification on cadavers, as well as functional and clinical relevance.
2. Apply their anatomical knowledge to develop a diagnostic reasoning approach to basic clinical and pathological scenarios.
3. Develop stronger problem-solving, communication and collaboration skills through classroom discussions, group work and verbal assessments.

3. Instructors and Regions:

Course Coordinator	Contact Information
Dr. Stephen Renaud	srenaud4@uwo.ca

Instructors	Contact Information	Region	Dates
Dr. Katherine Willmore	katherine.willmore@schulich.uwo.ca	Head & Neck	Sep 12 – Nov 10 2022
Dr. Stephen Renaud	srenaud4@uwo.ca	Thorax & Back	Nov 14 – Dec 20 2022
Dr. Charles Rice	crice@uwo.ca	Limbs/MSK	Jan 9 – Feb 16 2023
Dr. Tyler Beveridge	tbeverid@uwo.ca	Abdomen & Pelvis	Feb 16 – Apr 14 2023

Teaching Assistants	
Erinn Brown	ebrow227@uwo.ca
Rebecca Elgie	relgie2@uwo.ca

4. Timetable:

Mode	Dates	Time	Location
Lecture/tutorial ^{1,2}	Monday	10:00 – 12:00	MSB447
	Wednesday	12:30 – 2:30	MSB447
Labs	Wednesday	8:30 – 11:30	MSB483
	Thursday	8:30 – 11:30	MSB483

Please refer to the course website for a detailed schedule of lectures and labs

¹Some of these sessions may be used for labs.

²Although all lectures/tutorials are planned for in-person instruction, given the uncertain and evolving situation with COVID19, there may be a need to have classes online through zoom on short notice.

Course weight: 2.0

Textbook requirements: (or equivalent)

1. *Essential Clinical Anatomy*, 6th ed. Moore, Agur & Dalley, 2014: ISBN 978-1496369659, or an equivalent text of your choice
2. An atlas of your choice. Atlases are available in the lab. Dissectors will be required and are also supplied in the lab.
3. *Langman's Medical Embryology*, 14th ed., Sadler, 2014: ISBN 978-1496383907

Technical Requirements (if classes are required to be online due to COVID-related restrictions):



Stable internet connection



Laptop or computer



Working microphone (optional)



Working webcam (optional)

Evaluation of Student Performance:

Assessment is by formative oral examinations during laboratory sessions, and a final VIVA. Attendance is not taken but clinical anatomy students must maintain an overall 80% in the course (see [student handbook](https://www.schulich.uwo.ca/anatomy/graduate/forms) (<https://www.schulich.uwo.ca/anatomy/graduate/forms>) and all components of the course must be completed to pass.

Formative oral examinations: 80% of final mark.

Students are expected to prepare for laboratory sessions by remaining up-to-date with the course material and laboratory dissections. As such, students will be routinely evaluated during laboratory sessions using formative oral examinations. Oral examinations during each unit (head/neck; back/thorax; MSK/limbs; and abdomen/pelvis) are equally weighted, such that the average marks for oral examinations during each unit contribute 20% of the final mark. The structure of formative evaluations and number of quizzes may differ between units and will be up to the discretion of the instructor.

Formative oral examinations that take place during laboratory sessions:

Head & Neck: 20% of final mark

Back & Thorax: 20% of final mark

Limbs/MSK: 20% of final mark

Abdomen & Pelvis: 20% of final mark

*Given the uncertain nature of COVID-19, in the event where frequent formative evaluations are no longer possible (e.g. the anatomy lab is temporarily inaccessible or physical distancing guidelines preclude close interactions between instructor and student), an online assessment(s) may be substituted. The content, format, and delivery of this online assessment will be up to the discretion of the instructor. The online assessment may receive different marks weighting than formative oral examinations, but the total grade contribution for the unit to the overall course will remain at 20%.

Final VIVA: 20% of final mark.

A VIVA (formal oral examination) will take place during the last half of April 2023 (date to be determined). The exam will consist of one-on-one interactions with course instructors containing a dissected body and/or prosected specimens. Students will be expected to demonstrate an advanced understanding of anatomy and embryology by answering questions asked by the instructors, and be able to integrate their

knowledge to explain complex body systems and clinical scenarios. As above, should unforeseen difficulties arise in which an in-person VIVA is not possible, an online assessment may be used.

Policy on Accommodation for Medical Illness

Students are expected to attend all classes and laboratory sessions. If a student is not able to attend class times, they must contact the course instructor or coordinator and excuse themselves from that class or lab. A student requiring academic accommodation due to illness should use the Student Medical Certificate when visiting an off-campus medical facility or request a Record's Release Form (located in the Dean's Office) for visits to Student Health Services.

The form can be found at: <https://student.uwo.ca>

See note below detailing "additional precautions due to COVID-19".

- **Documentation for medical or non-medical reasons**, according to the **Policy on Accommodation for Medical Illness** is required for absences from tests or exams. Documentation is not required for work worth less than 10% of the total course grade. When documentation is required for missing an exam or test, such documentation must be submitted by the student directly to the instructor.
- The date and nature of a make-up test/exam will be determined by the instructor, in consultation with the student. Generally, students who miss a lab exam will be given a verbal 1:1 lab test.

DISSECTING ROOM REGULATIONS

1. The following are **mandatory** in the lab:
 - i. **Lab coat** - should be used in the anatomy lab only. It must be reasonably clean at all times.
 - ii. **Disposable gloves** – for handling cadaveric material.
 - iii. **Safety glasses**.
 - iv. **Close-toed footwear** – sandals must not be worn.
 - v. **Surgical mask** – Surgical masks must be worn to decrease risk of COVID-19 transmission. The requirement to wear a mask (and possibly other PPE essentials) in the anatomy lab and classroom may change throughout the year depending on university, department, and lab policies.
2. For health reasons, no food or drinks can be taken into the dissecting room.
3. Cadaveric material must not be removed from the dissecting room.
4. You are not permitted to take anyone into the dissecting room without the special permission of the course instructor, lab manager, or Chair of the Department of Anatomy & Cell Biology.

5. Cameras are not allowed in the dissecting room.
6. Report any injuries acquired in the lab to a faculty or staff member as soon as possible. First aid materials are available.
7. Handle specimens and models with care. When not in use, please ensure that specimens are covered up or placed in their correct containers.
8. If there are any concerns, please contact the Anatomy Lab Manager: Haley Linklater: haley.linklater@schulich.uwo.ca

Additional precautions due to COVID-19: All students are required to abide by safety measures determined at the University, Faculty and Department levels. The safety guidelines may vary throughout the year based on ongoing risk of COVID19 transmission. In class and the anatomy lab, students should maintain physical distancing as best as possible, and ensure that hands are washed/sanitized before and after entering the lab. Students are strongly encouraged to isolate if experiencing COVID19-related symptoms and/or tested positive on a rapid antigen test (or other suitable test) within 5 days. Accommodation will be provided for any student exhibiting COVID-19-related symptoms.

What it Means to Work with Cadaveric Specimens

During the year you will have the privilege of working with cadaveric specimens. You must treat them with respect at all times.

Understandably, many students feel uneasy about the prospect of working with cadaveric material. In order to prepare you for the experience, there will be a short service of remembrance, held in the lab on the first day of class. It is a time to thank the donors and to reflect on what their gift means to your education. For some students, this will be their first experience of death and dying and many have found the service very useful in coming to terms with mortality. There will also be an orientation session about laboratory procedures at the beginning of the course.

At the end of the year (typically in May), there will be a memorial service to which families and friends of the donors are invited. This is very much a student-centred service, with readings and personal reflections from students about what the gifts of the donors have meant to them. Medical, dental and health sciences students take part in the service and it has been an incredibly moving and meaningful experience for both the families and the students. It is expected that students enrolled in this course will attend the memorial service. It is also recommended and appreciated for students in this course to contribute as volunteers for the memorial service.

Statement of Academic Offences:

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholoff.pdf.

Senate regulations require ALL instructors to include the following statements on plagiarism, cheating and proficiency in English in the course outline:

“Students must write their essays and assignments in their own words. Whenever students take an idea or passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar).”