

Anatomy and Cell Biology
**ANATCELL 3309, Mammalian Histology,
Sections 001/650**

Course Syllabus for Fall/Winter 2022/23



Western University is committed to a **thriving campus**; therefore, your health and wellness matter to us! The following link provides information about the resources available on and off campus to support students: <https://www.uwo.ca/health/> Your course coordinator can also **guide you** to resources and/or services should you need them.

1. Technical Requirements:



Stable internet connection



Laptop or computer



Working microphone



Working webcam

2. Important Dates:



Classes Begin	Reading Week	Classes End	Study day(s)	Exam Period
September 8	October 31– November 6	December 8	December 9	December 10–22

* November 30, 2022: Last day to drop a first-term full course without penalty

Classes Resume	Reading Week	Classes End	Study day(s)	Exam Period
January 9	February 18-26	April 10	April 11-12	April 13–30

3. Contact Information



Course Coordinator	Contact Information
Dr. Kem Rogers	krogers@uwo.ca
Course Instructor	
Dr. Susanne Schmid	Susanne.Schmid@schulich.uwo.ca

Teaching Assistant(s)	Contact Information
Kayla Vieno (Course Head TA)	kvieno@uwo.ca
Angela Pecyna (F2F Head TA)	apecyna@uwo.ca
Teaching Assistant(s)	Contact Information

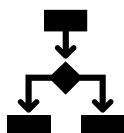
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4. Course Description and Design

ANATCELL 3309 is a detailed study of the cellular and microscopic structure of the various tissues and organ systems of the body, with emphasis on humans, and other mammals used in medical research. Systems are examined stressing the relations of structure to function.

Delivery Mode:

Delivery Mode	Dates	Time	Location	Frequency
Lectures, synchronous/recorded	Tu, Th	11:30 AM - 12:30 PM EST	SEB 2200	weekly
Face 2 Face Labs, live	Mon	11:30 am to 1:30 pm, 1:30 to 3:30 pm	MSB 117	weekly
Online Labs, live/asynchronous	Mon	3:30 PM - 4:30 PM EST	Online	weekly
Online Q&A, synchronous	Variable	Variable	Online	weekly



- Attendance at sessions is required for sections 002 and 003 (F2F labs)
- Missed work should be completed within 24 hours (See below Section 14)
- A recording will be provided of the face to face lectures and online laboratories
- Closed captioning will be provided on audio or video recordings

All course material will be posted to OWL: <http://owl.uwo.ca>. Any changes will be indicated on the OWL site and discussed with the class.

If students need assistance, they can seek support on the [OWL Help page](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#). They can be contacted by phone at 519-661-3800 or ext. 83800.

[Google Chrome](#) or [Mozilla Firefox](#) are the preferred browsers to optimally use OWL; update your browsers frequently. Students interested in evaluating their internet speed, please click [here](#).

5. Learning Outcomes

Upon successful completion of this course, students will be able to:



- a) explain structure/function relationships of tissues, organs, and their parts at the microscopic level.
- b) navigate histological sections using a real or virtual microscope.
- c) recognize and name tissues, organs and their parts in microscopic images.

6. Course Content and Schedule

2022

		Lecture Schedule	Instructor	Laboratory Schedule	
September	8	Introduction and Techniques	Kayla Vieno		
M	12		Dr. Rogers	Lab 1: Microscopy & Histology Techniques	
Tu	13	Cells 1: Membranes, Organelles			
Th	15	Cells 2: Nucleus, Cytoskeleton			
M	19			Lab 2: Cytology	
Tu	20	Epithelia & Glands			
Th	22	Epithelial Junctions & Surface			
M	26			Lab 3: Epithelia & Glands	
Tu	27	Connective Tissue Matrix			
Th	29	Connective Tissue Cells & Types			
October	3			Lab 4: Connective Tissue	
Tu	4	Cartilage		Quiz 1	
Th	6	Bone			
M	10	Thanksgiving Day, NO CLASS			
Tu	11	Bone Formation			
*Wed	12			Lab 5: Cartilage	
Th	13	Cells of the Nervous System	Dr. Schmid		
M	17		Dr. Schmid	Lab 6: Bone & Bone Formation	
Tu	18	Cerebrum & Cerebellum			
Th	20	Spinal Cord & Ganglia			
M	24			Lab 7: Central Nervous System	
Tu	25	Peripheral Nerves			
Th	27	Skeletal Muscle			
November	1	Fall Reading Week (Oct 31- Nov 6), NO CLASS			
M	7			Lab 8: Peripheral Nervous System	Quiz 2
Tu	8	Cardiac & Smooth Muscle	Dr. Rogers		
TH	10	Heart	Kayla Vieno		
M	14		Dr. Rogers	Lab 9: Muscle	
Tu	15	Vessels			
Th	17	Blood Cells			
M	21			Lab 10: Heart & Circulatory System	
Tu	22	Erythropoiesis & Granulopoiesis			
Th	24	Cells of the Immune System			
M	28			Lab 11: Blood & Blood Formation	
Tu	29	Lymph Nodes			
December	1	Spleen & Thymus			
M	5			Lab 12: Lymphoid Tissue & Organs	
Tu	6	Skin	Quiz 3		
Th	8	Skin Derivatives			

2023

		Lecture Schedule	Instructor	Laboratory Schedule		
January	9		Dr. Rogers	Lab 13: Integument		
Tu	10	Respiratory Passages				
Th	12	Lung				
M	16			Lab 14: Respiratory System		
Tu	17	Teeth				
TH	19	Tongue & Salivary Glands				
M	23			Lab 15: Digestive System 1	Quiz 4	
Tu	24	Esophagus & Stomach		Kayla Vieno		
Th	26	Intestines				
M	30				Lab 16: Digestive System 2	
Tu	31	Liver				
February	2	Gall Bladder & Exocrine Pancreas	Dr. Rogers			
M	6				Lab 17: Digestive System 3	
Tu	7	Kidney				
Th	9	Urinary Passages				
M	13				Lab 18: Urinary System	
Tu	14	Adrenal, Thyroid, Parathyroid Glands				
Th	16	Pineal Gland & Endocrine Pancreas				
		Reading Week Feb 18 -26				
M	27			Lab 19: Adrenal, Thyroid, Parathyroid	Quiz 5	
Tu	28	Pituitary Gland				
March	2	Testis	Angela Pecyna			
M	6			Lab 20: Endocrine Pancreas, Pineal & Pituitary		
Tu	7	Male Ducts				
Th	9	Ovary				
M	13			Lab 21: Male Reproductive System		
Tu	14	Oviduct & Uterus				
Th	16	Mammary Gland				
M	20			Lab 22: Female Reproductive System		
Tu	21	Eye 1		Dr. Schmid		
Th	23	Eye 2				
M	27		Lab 23: Eye			
Tu		Ear 1				
Th	30	Ear 2				
April	3		Dr. Rogers		Lab 24: Ear	Quiz 6
Tu	4	Lecture Review				
Th	6	Lab Review				

***NOTE THAT THE OCTOBER 12 CARTILAGE LAB WILL BE ONLINE FOR ALL STUDENTS. It will be held on a Wednesday to accommodate the holiday Monday that week.**

7. Participation and Engagement



- Students are expected to participate and engage with content as much as possible
- Students can participate through the Q&A on Echo360 during live sessions or after watching the recording
- Students can also participate by interacting in the OWL forums with their peers and instructors

8. Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated.

Assessment	Format	Weighting (%)	Date
Quiz 1	Online via OWL	5	Oct 3
Quiz 2	Online via OWL	5	Nov 7
Quiz 3	Online via OWL	5	Dec 5
Term 1 Lab Assignments Total	Online via OWL	10	Weekly
Mid-Year Exam	In Person	25	TBA
Quiz 4	Online via OWL	5	Jan 23
Quiz 5	Online via OWL	5	Feb 27
Quiz 6	Online via OWL	5	Apr 3
Term 2 Lab Assignments Total	Online via OWL	10	Weekly
Final Exam	In Person	25	TBA

- All assignments are due at the end of the lab (F2F) or by 12 midnight the next day (online)
- Students are responsible for ensuring that the correct file version is uploaded; incorrect submissions including corrupt files could be subject to late penalties (see below) or a 0
- Written assignments will be scrutinized for originality
- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days

Any grade appeals on assignments, quizzes, or midterms must be received within 3 weeks of the grade being posted. Click [here](#) for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

90-100	One could scarcely expect better from a student at this level
80-89	Superior work which is clearly above average
70-79	Good work, meeting all requirements, and eminently satisfactory
60-69	Competent work, meeting requirements
50-59	Fair work, minimally acceptable
below 50	Fail

Information about late or missed evaluations:

- Late assessments without accommodation will be subject to a late penalty of 50%/day
- Missed assignments or quizzes will be handled by the instructors. Accommodation will be provided for individuals with medical or family emergencies. DO NOT submit details of the medical issue or emergency, just indicate that you require accommodation. Accommodation for missed exams will be handled by BMSc counsellors.
- An assessment cannot be submitted after it has been returned to the class; for those granted an accommodation the final grade will be based on graded assignments only, otherwise the grade for the late assignment or quiz will be 0.

- Students must sit the mid-year and final exam in order to complete the course. Any student missing an exam and the one makeup offered will have to wait for the next time the course is offered to sit the exam.

INC (Incomplete Standing): If a student has been approved by the Academic Counselling Office (in consultation with the instructor/department) to complete term work at a later date, an INC will be assigned. Students with INC will have their course load in subsequent terms reduced to allow them to complete outstanding course work. Students may request permission from Academic Counselling to carry a full course load for the term the incomplete course work is scheduled.

SPC (Special examination): If a student has been approved by the Academic Counselling Office to write a Special Examination and the final exam is the only outstanding course component, an SPC will be assigned. If the class has a makeup exam, the student is expected to write the makeup exam. If the class doesn't have a makeup exam or the student misses the makeup exam for reasons approved by the Academic Counselling Office, the student will write the exam the next time the course is offered. Outstanding SPCs will reduce the course load for the term the exam is deferred as outlined in [Types of Examinations](#) policy.

9. Communication:



- Students should check the OWL site every 24–48 hours
- Students should email their instructor(s) and their assigned teaching assistant(s) using the provided email addresses above.
- Emails will be monitored daily; students will receive a response in 24–48 hours
- This course will use OWL and Echo360 for discussions
- Students should post all course-related queries on the discussion forum so that everyone can access the questions and responses

10. Office Hours:



- Office hours will be held on an ad hoc basis (appointment by email).

11. Resources



- All resources will be posted in OWL
- Strongly recommended textbook: Histology: A Text and Atlas (8th edition) by W. Pawlina (This textbook is a great way to learn the material)

12. Professionalism & Privacy:



Western students are expected to follow the [Student Code of Conduct](#). Additionally, the following expectations and professional conduct apply to this course:

- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared (e.g., Must Knows Facebook group, Course Hero, Chegg, etc.)
- Recordings are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed

Western is committed to providing a learning and working environment that is free of harassment and discrimination. All **students**, staff, and faculty have a role in this commitment and have a responsibility to ensure and promote a safe and respectful learning and working environment.

Relevant policies include Western's [Non-Discrimination/Harassment Policy](#) (M.A.P.P. 1.35) and [Non-Discrimination/Harassment Policy – Administrative Procedures](#) (M.A.P.P. 1.35).

Any **student**, staff, or faculty member who experiences or witnesses' behaviour that may be harassment or discrimination **must report the behaviour** to the Western's [Human Rights Office](#). Harassment and discrimination can be human rights-based, which is also known as EDI-based, (sexism, racism, transphobia, homophobia, islamophobia, xenophobia, antisemitism, and ableism) or non-human rights-based (personal harassment or workplace harassment).

13. How to Be Successful in this Class:

Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.



1. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule your time throughout the course.
2. Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed in this class.
3. Follow weekly checklists created on OWL or create your own to help you stay on track.
4. Take notes as you go through the lesson material. Keeping handwritten notes or even notes on a regular Word document will help you learn more effectively than just reading or watching the videos.
5. Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.
6. Do not be afraid to ask questions. If you are struggling with a topic, check the online discussion boards or contact your instructor(s) and or teaching assistant(s).
7. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.

14. Western Academic Policies and Statements

Absence from Course Commitments

A. Absence for medical illness:

Students must familiarize themselves with the [Accommodation for Illness Policy](#).

A student seeking academic accommodation for any **work worth less than 10%** must contact the instructor or follow the appropriate Department or course specific instructions provided on the course outline. Instructors will use good judgment and ensure fair treatment for all students when considering these requests. You are not required to disclose details about your situation to your instructor; documentation is not required in this situation, and you should not send any pictures to your instructor.

If you are unable to meet a course requirement for any **work worth 10% or greater** due to illness or other serious circumstances, you must provide valid medical or other supporting documentation to the Academic Counseling as soon as possible and contact your instructor immediately. It is the student's responsibility to make alternative arrangements with their instructor once the accommodation has been approved and the instructor has been informed. Please note that the format of a make-up test, exam, or assignment is at the discretion of the course coordinator.

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:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

B. Absence for non-medical reasons:

Student absences might also be approved for non-medical reasons such as religious holidays and compassionate situations. Please review the policy on [Accommodation for Religious Holidays](#). All non-medical requests must be processed by Academic Counselling. Not all absences will be approved; pay attention to the academic calendar and final exam period when booking any trips.

C. Special Examinations

A Special Examination is any examination other than the regular examination, and it may be offered only with the permission of the Dean of the Faculty in which the student is registered, in consultation with the instructor and Department Chair. Permission to write a Special Examination may be given on the basis of compassionate or medical grounds with appropriate supporting documents. To provide an opportunity for students to recover from the circumstances resulting in a Special Examination, the University has implemented Special Examinations dates. These dates as well as other important information about examinations and academic standing can be found [here](#).

Academic Offenses

Scholastic offences are taken seriously, and students are directed [here](#) to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence.

Accessibility Statement

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Accessible Education (AE) at 661-2111 x 82147 for any specific question regarding an accommodation or review [The policy on Accommodation for Students with Disabilities](#)

Correspondence Statement

The centrally administered **e-mail account** provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner. You can read about the privacy and security of the UWO email accounts [here](#).

Discovery Credit Statement

Students are permitted to designate up to 1.0 Discovery Credit course (or equivalent) for pass/fail grading that can be counted toward the overall course credits required for their degree program. The details of this policy and the deadlines can be found [here](#).

Plagiarism: Assignments and quizzes will be analyzed for signs of plagiarism. This includes use of assignments from past years. Plagiarism will be reported as outlined in the Student Code of Conduct, and will result in 0 marks.

15. BMSUE Academic Policies and Statements

Cell Phone and Electronic Device Policy (for in-person tests and exams)

The Schulich School of Medicine & Dentistry is committed to ensuring that testing and evaluation are undertaken fairly across all our departments and programs. For all tests and exams, it is the policy of the

School that any electronic devices, i.e., cell phones, tablets, cameras, or iPod are strictly prohibited. These devices MUST be left either at home or with the student's bag/jacket at the front of the room and MUST NOT be at the test/exam desk or in the individual's pocket. Any student found with one of these prohibited devices will receive a grade of zero on the test or exam. Non-programmable calculators are only allowed when indicated by the instructor. The program is not responsible for stolen/lost or broken devices.

Copyright and Audio/Video Recording Statement

Course material produced by faculty is copyrighted and to reproduce this material for any purposes other than your own educational use contravenes Canadian Copyright Laws. You must always ask permission to record another individual and you should never share or distribute recordings.

Rounding of Marks Statement

Across the Basic Medical Sciences Undergraduate Education programs, we strive to maintain high standards that reflect the effort that both students and faculty put into the teaching and learning experience during this course. All students will be treated equally and evaluated based only on their actual achievement. **Final grades** on this course, irrespective of the number of decimal places used in marking individual assignments and tests, will be calculated to one decimal place and rounded to the nearest integer, e.g., 74.4 becomes 74, and 74.5 becomes 75. Marks WILL NOT be bumped to the next grade or GPA, e.g., a 79 will NOT be bumped up to an 80, an 84 WILL NOT be bumped up to an 85, etc. The mark attained is the mark you achieved, and the mark assigned; requests for mark "bumping" will be denied.

16. Support Services

The following links provide information about support services at Western University.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

[Academic Counselling \(Science and Basic Medical Sciences\)](#)

[Appeal Procedures](#)

[Registrarial Services](#)

[Student Development Services](#)

[Student Health Services](#)