



## ANATCELL 3309 MAMMALIAN HISTOLOGY

Faculty of Schulich Medicine & Dentistry  
Department of Anatomy & Cell Biology



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. Course Overview & Important Dates

	Delivery Mode	Dates	Time
<b>Lectures</b>	Asynchronous recordings	Variable – see course schedule	Posted on OWL at 11:30am (EST)
<b>Labs</b>	Recommended synchronous zoom sessions	Variable – see course schedule	5pm (EST)
	Asynchronous recordings		Posted on OWL at 6pm (EST)

Classes Begin	Classes End	Exam Period	Holidays
May 8	July 28	July 31 – August 3	May 22, July 1

**June 12, 2023:** Last day to drop a 12-week full-course (1.0) without penalty

### 3. Contact Information

Course Coordinator	Contact Information
Angela Pecyna	<a href="mailto:apecyna@uwo.ca">apecyna@uwo.ca</a>
Course TAs	
Kayla Vieno (Head TA)	<a href="mailto:kvieno@uwo.ca">kvieno@uwo.ca</a>
Bryn Bhalerao	<a href="mailto:bbhalera@uwo.ca">bbhalera@uwo.ca</a>
Charlotte Jones-Whitehead	<a href="mailto:cjoneswh@uwo.ca">cjoneswh@uwo.ca</a>
Supreet Singh	<a href="mailto:ssing495@uwo.ca">ssing495@uwo.ca</a>

### 4. Course Description & 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.

- Lectures should be watched **before** the appropriate lab.
- Live attendance of lab sessions is **NOT** required but is strongly recommended.
- A recording will be provided for all lectures and labs.

- Virtual lectures and labs will be recorded with Panopto, accessible through OWL (see OWL site for details).
- All course material will be posted to [OWL](#). Any changes will be indicated on the OWL site and discussed with the class.
- Students needing assistance can seek support on the [OWL Help page](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#).
- Google Chrome or Mozilla Firefox are the preferred browsers to optimally use OWL; update your browsers frequently. For evaluating internet speed, please click [here](#).

### 5. Learning Outcomes

By the end of the course, students will be able to:

- Explain the structure-function relationship of tissues and organs at the microscopic level
- Navigate histological sections using a virtual microscope
- Recognize and name tissues and organs in microscopic images

6. Course Schedule

May 2023						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8 <b>Lecture: Histology &amp; Microscopy Techniques</b> (course intro to be discussed during Lab 1)	9 <b>Lecture: Cell Membrane &amp; Organelles</b>	10 <b>Lab 1: Course Introduction &amp; Histology &amp; Microscopy Techniques</b>	11 <b>Lecture: Nucleus &amp; Cytoskeleton</b>	12 <b>Lecture: Epithelia &amp; Glands</b>	13
14	15 <b>Lecture: Epithelial Junctions &amp; Surface Specializations</b>  <b>Lab 2: Cytology</b>	16 <b>Lecture: Connective Tissue Matrix</b>	17 <b>Lab 3: Epithelia &amp; Glands</b>	18 <b>Lecture: Connective Tissue Cells &amp; Types</b>	19 <b>Lecture: Cartilage</b>	20
21	22 VICTORIA DAY!  <b>NO CLASS</b>	23 <b>Lecture: Bone</b>  <b>Lab 4: Connective Tissue</b>	24 <b>Lecture: Bone Formation</b>	25 <b>Lecture: Skeletal Muscle</b>  <b>Lab 5: Cartilage, Bone, Bone Formation</b>	26 <b>Lecture: Cardiac &amp; Smooth Muscle</b>	27
28	29 <b>Lecture: Heart</b>  <b>Lab 6: Muscle</b>  <b>Quiz 1</b>	30 <b>Lecture: Vessels</b>	31 <b>Lab 7: Heart &amp; Circulation</b>			

SUMMER 2023 SYLLABUS

June 2023						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 Lecture: Blood Cells	2 Lecture: Erythropoiesis & Granulopoiesis	3
4	5 Lecture: Cells of the Nervous System  Lab 8: Blood & Blood Formation	6 Lecture: Cerebrum & Cerebellum	7  <b>Quiz 2</b>	8 Lecture: Spinal Cord & Ganglia  Lab 9: Central Nervous System	9 Lecture: Peripheral Nerves	10
11	12 Lecture: Cells of the Immune System  Lab 10: Peripheral Nervous System	13 Lecture: Lymph Nodes	14 Lecture: Spleen & Thymus  Lab 11: Lymphoid Tissue & Organs  <b>Quiz 3</b>	15  Half Term Lab Review	16	17  <b>HALF TERM EXAM (12pm EST)</b>
18	19 Lecture: Skin	20 Lecture: Skin Derivatives	21 Lab 12: Integument	22 Lecture: Respiratory Passages	23 Lecture: Lung	24
25	26 Lecture: Teeth  Lab 13: Respiratory System	27 Lecture: Tongue & Salivary Glands	28 Lab 14: Digestive System 1	29 Lecture: Esophagus & Stomach	30 Lecture: Intestines	

SUMMER 2023 SYLLABUS

July 2023						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 
2	3 Lecture: Liver  Lab 15: Digestive System 2	4 Lecture: Gall Bladder & Exocrine Pancreas	5 Lab 16: Digestive System 3  Quiz 4	6 Lecture: Kidney	7 Lecture: Urinary Passages	8
9	10 Lecture: Adrenal, Thyroid, & Parathyroid Glands  Lab 17: Urinary System	11 Lecture: Pineal Gland & Endocrine Pancreas	12 Lab 18: Adrenal, Thyroid, & Parathyroid Glands	13 Lecture: Pituitary Gland	14 Lecture: Testes	15
16	17 Lecture: Male Ducts & Glands  Lab 19: Endocrine Pancreas & Pineal & Pituitary Glands	18 Lecture: Ovaries	19 Lab 20: Male Reproductive System  Quiz 5	20 Lecture: Oviduct, Uterus, & Vagina	21 Lecture: Mammary Gland	22
23	24 Lecture: Eye  Lab 21: Female Reproductive System	25 Lecture: Ear	26 Lab 22: Eye & Ear  Quiz 6	27	28  Final Lab Review	29
30	<b>FINAL EXAM PERIOD (July 31 – August 3)</b>					

## 7. Online Participation & Engagement

- Students are expected to participate and engage with content as much as possible
- The Q&A Forum on OWL is the best place to ask questions
- A TA will monitor OWL forums regularly

## 8. Evaluation

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

Assessment	Format	Weighting (%)	Date
Quiz 1	Online via OWL	5	May 29
Quiz 2	Online via OWL	5	June 7
Quiz 3	Online via OWL	5	June 14
First Half Lab Assignments Total	Online via OWL	10	Weekly
Half Term Exam	Online via OWL (ProctorTrack)	25	June 17
Quiz 4	Online via OWL	5	July 5
Quiz 5	Online via OWL	5	July 19
Quiz 6	Online via OWL	5	July 26
Second Half Lab Assignments Total	Online via OWL	10	Weekly
Final Exam	Online via OWL (ProctorTrack)	25	TBA (Jul. 31-Aug. 3)

- The exams are **3 hours** in length and will cover material from lectures and labs. **80 MCQ** (single best answer) will examine structure-function relationships and **50 questions** associated with images will cover lab content.
- The final exam is **NOT cumulative** and covers material taught in the second half of the course.

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.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	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 course coordinator and head TA. Accommodation will be provided for individuals with medical or family emergencies. DO NOT submit details of the emergency, just indicate if it was medical or family. Accommodation for missed exams will be handled by academic 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 half term exam 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 daily
- ☑ Students should contact their course coordinator and teaching assistants by email
- ☑ Emails will be monitored daily; students will receive a response in 24-48 hours or less
- ☑ Students should use the forum on OWL for questions and discussions
- ☑ Students should post all course-related content on the OWL forum so that everyone can access answers to questions
- ☑ The discussion forums will be monitored daily by teaching assistants

**10. Office Hours**

Office hours may be held upon email request. Zoom or in-person options are available.

### 11. Resources

- All resources (lecture + lab) will be posted on OWL
- Supplemental textbook option: [Histology: A Text and Atlas, Pawlina, W. 8th Edition](#)

### 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:

- Students are expected to follow online etiquette expectations provided on OWL
- All course materials created by the instructor(s) are copyrighted and cannot be sold/shared
- Recordings of course material are not permitted (audio or video) without explicit permission
- Permitted recordings are not to be distributed
- Copying of assignments is considered plagiarism and will be handled and reported as academic misconduct
- Students will be expected to take an academic integrity pledge before some assessments

### 13. How to Be Successful in this Course

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

1. Invest in a planner to keep track of your courses. Populate all your deadlines at the start of the term and schedule time at the start of each week to get organized and manage your time.
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. Create weekly checklists to help you stay on track.
4. Take notes as you go through the lesson material. Treat this course as you would a face-to-face course. 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 teaching assistants.
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 & 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](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**

### **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.

### **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/>

To connect with a case manager or set up an appointment, please contact [support@uwo.ca](mailto:support@uwo.ca).

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

[Appeal Procedures](#)

[Registrarial Services](#)

[Student Development Services](#)