

Pathology
Pathology 3500 Introduction to Human Pathology

Course outline for 2020/2021



Although this academic year might be different, Western University is committed to a **thriving campus**. We encourage you to check out the [Digital Student Experience](#) website to manage your academics and well-being. Additionally, the following link provides available resources to support students on and off campus: <https://www.uwo.ca/health/>.

1. Technical Requirements:



Stable internet connection



Laptop or computer



Working microphone (for online proctoring)



Working webcam (for online proctoring)

2. Course Overview and Important Dates:



Delivery Mode	Dates	Time
Online	Not Applicable	

*Details about design and delivery of the course are listed below in Section 4

Classes Start	Reading Weeks	Classes End	Study day(s)	Exam Period
September 9	November 2 - 8	December 9	December 10	December 11 - 22
January 4	February 13 - 21	April 5	April 6 and 7	April 8 - 30

*November 30, 2020: Last day to drop a full course and full-year half course without penalty

3. Contact Information



Course Coordinator	Contact Information
Dr. Matt Cecchini	mcecchi@uwo.ca
Dr. Liena Zhao	liena.zhao@lhsc.on.ca

Teaching Assistant(s)	Contact Information
Darya Abdolmaleki	dabolma@uwo.ca
Moheem Halari (Fall term only)	mhalari@uwo.ca
Emmanuel Wong (Winter term only)	ewong347@uwo.ca
Course Administrator:	
Cheryl Campbell	ccampbel@uwo.ca

4. Course Description and Design

Recorded lectures available on OWL

Antirequisite(s): Pathology 2420A, the former Pathology 3240A, Pathology 3245B.

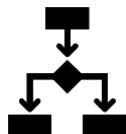
Prerequisite(s): Biochemistry 2280A; Biology 2382A/B

Extra Information: 2 lecture hours, 1.0 course. Recorded lectures available on OWL

Pathology - the study of disease.

Pathology 3500 is: An introduction to human pathology – the study of disease. Students will be introduced to general mechanisms of disease (e.g. inflammation, injury, neoplasia, disturbed hemodynamics). These general processes will then be discussed as they apply to specific diseases of organ systems.

Who are the lecturers? All of the lecturers are clinical or experimental pathologists in London Health Sciences Centre's acute care hospitals or hold University appointments. Modern pathologists, particularly in a city such as London with a comparably low rate of violent death, concern themselves primarily with the mysteries of disease in the living.



Senate regulation regarding the student's responsibility regarding requisites:

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Mode	Dates	Time	Frequency
Virtual asynchronous	N/A	[2] hours	weekly

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.

5. Course Goal

The objectives of the first part of this course are to familiarize the student with some of the basic descriptive vocabulary of disease processes (medical terminology), then to allow the student to obtain an understanding of disease processes, with their underlying molecular mechanisms and clinical-pathological correlates. Following on the introductory pathology component, the second part of the course will lead the student into an understanding of pathological disease processes as they affect specific organ systems.

6. Learning Outcomes

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

1. Define pathology and disease.
2. Define morbidity and mortality and distinguish between them and have a general understanding of which diseases/disorders cause the greatest mortality and morbidity.
3. Understand and be able to define commonly used terms and vocabulary used to describe various aspects of disease (e.g. signs, symptoms, etiology, pathogenesis, manifestations, sequelae, prognosis).
4. Discuss broadly the causes of disease and the categories under which they can be considered.
5. Describe pathological mechanisms underlying disease processes: cell injury, inflammation, immunity, neoplasia, vascular disturbances (congestion, hyperemia, edema, thrombosis, ischemia, shock and hemorrhage), metabolic disorders.
6. Understand the clinical manifestations of pathological processes.
7. Discuss the diseases affecting particular organ systems/tissues e.g. hematopoietic and lymphoid, kidney and urinary tract, endocrine system, male and female genital tracts, lungs, breasts, gastrointestinal tract, hepatobiliary system, cardiovascular system, central nervous system and musculoskeletal system.
8. Describe pathological mechanisms underlying particular disease processes affecting particular organ systems/tissues (cell injury, inflammation, immunity, neoplasia, vascular disturbances (congestion, hyperemia, edema, thrombosis, ischemia, shock and hemorrhage).
9. Understand the clinical manifestations of pathological processes affecting particular organ systems/tissues



7. Course Content and Schedule

Dates	Topic	Instructor
Section #1		
Sept 9	Introduction / Causes of Disease	Dr. Cecchini
Sept 10 - 21	Cell Injury, Adaptation & Cell Death	Dr. Haig
Sept 22 – 30	Inflammation, Regeneration & Repair	Dr. Zeman-Pocrnich
Oct 1 – 14	Disturbed Blood Flow & Hemodynamics	Dr. Gabril
Oct 15 – Oct 21	Neoplasia	Dr. Chakrabarti
October 28	Exam #1: Covers content up to and including Neoplasia	
Section #2		
Oct 21 – Nov 2	Immune Disorders	Dr. Howlett
Nov 2 – 8	Reading Week	
Nov 9 – 16	Pathology of Infection	Dr. Kwan
Nov 17 – 23	Hematopathology	Dr. Shepherd
Nov 23 – 30	Metabolic & Nutritional Diseases	Dr. Zhao
Dec 1 – 6	Congenital & Genetic Disease (Overview)	Dr. Kwan
Dec 7 – 11	Molecular Genetics	Dr. Duennwald
Dec 11 - 22	Exam #2: Covers from and including Immune Disorders to Molecular Genetics	
Section #3		
Jan 4 - 5	Pediatric Pathology	Dr. Cecchini
Jan 6 – 12	Kidney and Urinary Tract	Dr. Armstrong
Jan 13 – 17	Male genital tract	Dr. Armstrong
Jan 18 – 19	Female genital tract	Dr. Armstrong
Jan 20 – 25	Disease of the GI Tract	Dr. Parfitt
Jan 26 – Feb 1	Respiratory disease	Dr. Kwan
Feb 2 – 7	Endocrine disease	Dr. Howlett
Feb 10	Exam # 3: Covers content from and including Pediatric Pathology to Endocrine	
Section #4		
Feb 9 – 13	Diseases of the Hepatobiliary System Part 1	Dr. J. Walsh
Feb 13 - 21	Spring Reading Week	
Feb 22 – 23	Diseases of the Hepatobiliary System Part 2	Dr. Walsh
Feb 23 – March 1	Cardiovascular Disease	Dr. Tugaleva
March 2 – 7	Breast Disease	Dr. Zeman-Pocrnich
March 8 – 22	Diseases of the Central Nervous System	Dr. Hammond
March 24 – 29	Diseases of the Musculoskeletal System	Dr. Wehrli
April 8 – 30	Exam # 4 Covers all content from and including Hepatobiliary System to and including Disease of the Musculoskeletal system	



Note: This schedule is a general guide, students may review the material at their own pace to prepare for exams that cover the content listed above.

8. Online Participation and Engagement



— Students can participate by interacting in the forums with their peers, TAs and instructors

9. Evaluation

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

Assessment	Format	Weighting	Due Date
Exam #1	Multiple Choice	25%	October 28
Exam #2	Multiple Choice	25%	Dec 11 - 22
Exam #3	Multiple Choice	25%	Feb 9
Exam #4	Multiple Choice	25%	April 8 – 30

— Tests and examinations in this course will be conducted using the remote proctoring service, Proctortrack. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. More information about this remote proctoring service is available in the Online Proctoring Guidelines at the following link:

<https://www.uwo.ca/univsec/pdf/onlineproctorguidelines.pdf>.

Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. Information about the technical requirements are available at the following link:

<https://www.proctortrack.com/tech-requirements/>.

— The exam is expected to take no more than 1.0 hours to complete. All students will be allotted 2.5 hours. Consequently, most students who typically require extra time accommodation will not need any special arrangement for this assessment.

— All examinations are multiple choice. Both standard and K type (multiple-multiple) questions will be included. The content is taken primarily from the notes and the lecture material, but you will also be responsible for the text material as indicated

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:

- If a student misses one exam and the corresponding make-up exam for valid reasons (see Absence Policy), exam #4 (final exam) at the end of the course will be a cumulative exam (material from the entire year) worth 50% of Final Mark, and is subject to approval by the course coordinators.
- If a student misses two or more exams (i.e. more than one exam) or the final exam and it's corresponding make-up exam, he/she will be expected to write the final exam the next time the course is offered (i.e. the following year). This will be a cumulative exam (worth 25% multiplied by number of exams missed) and is subject to approval by the course coordinators.

10. Communication:



- This course will use the OWL forum for discussions
- Students should post all course-related content on the discussion forum so that everyone can access answers to questions
- The discussion forums will be monitored daily by instructors or teaching assistants. An effort will be made to respond to questions within 1 working day.
- We will do our best to answer all questions, however, questions posted within 3 working days of an exam will may be answered.

11. Office Hours:



- Ideally all questions will be discussed on the forum so that all can see and participate in the discussion.
- The TAs will run two virtual office hour sessions before each exam to answer live questions and common questions posted on the forum. The time will be decided by based on poll posted as an announcement in OWL.

12. Resources



- All resources will be posted in OWL
- Required textbook: "Robbins Basic Pathology", 10th ed. by Kumar, Abbas, & Aster, Saunders-Elsevier, 2018.

13. 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 are not permitted (audio or video) without explicit permission
 - Permitted recordings are not to be distributed
 - Students will be expected to take an academic integrity pledge before starting the course.
 - All recorded lectures will remain within the course site or unlisted if streamed

14. 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 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. 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.
4. Connect with others. Try forming an online study group and try meeting on a weekly basis for study and peer support.
5. 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).
6. Reward yourself for successes. It seems easier to motivate ourselves knowing that there is something waiting for us at the end of the task.

15. Western Academic Policies and Statements

Absence from Course Commitments

[Policy on Academic Consideration for Student Absences](#)

If you are unable to meet a course requirement due to illness or other serious circumstances, you must seek approval for the absence as soon as possible. Approval can be granted either through a **self-reported absence** or via the **Academic Counselling** unit. Students have two self-reports to use throughout the academic year; absence from course commitments including tests, quizzes, presentations, labs, and assignments that are worth 30% or less can be self-reported. Self-reported absences cover a student for 48 hours (yesterday + today or today + tomorrow). Your instructor will receive notification of your consideration; however, you should contact your instructor immediately regarding your absence. Students are expected to submit missed work within 24 hours of the end of the 48-hour period. Please review details of the [university's policy on academic consideration for student absences](#).

If you have used both their self-reported absences or will miss more than 48 hours of course requirements, a Student Medical Certificate (SMC) should be signed by a licensed medical or mental health practitioner and you should contact academic counselling. Academic Counselling will be operating virtually this year and can be contacted at scibmsac@uwo.ca.

Accommodation for Religious Holidays

The policy on Accommodation for Religious Holidays can be viewed [here](#).

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](#).

16. 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.

17. Support Services

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

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

[Appeal Procedures](#)

[Registrarial Services](#)

[Student Development Services](#)

[Student Health Services](#)