

Department of Physiology and Pharmacology
Pharmacology 2060B: Introductory Pharmacology and Therapeutics

Course Syllabus for Winter 2025



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

2. Important Dates:



Classes Begin	Reading Week	Classes End	Study day(s)	Exam Period
January 6	February 15–23	April 4	April 5–6	April 7–30

March 31, 2025: Last day to withdraw from second-term half course without academic penalty

3. Contact Information

Course Coordinator	Contact Information
Dr. Zachary Easton (he/him)	zeaston@uwo.ca

Instructor(s) or Teaching Assistant(s)	Contact Information
Sarah Enright (she/her)	OWL Brightspace forums
Lujain Ex eddin (she/her)	OWL Brightspace forums
Mingyi Li (she/her)	OWL Brightspace forums

4. Course Description and Design

Delivery Mode: Online, asynchronous

A course for students in the BSc in Nursing to provide a basic understanding of the fundamentals of drug action and the mechanisms of action and therapeutic use of the important classes of drugs.

Antirequisites: Pharmacology 3620

Pre-or Corequisite(s): Registration in the BSc in Nursing.

Extra Information: Only offered online (Distance Studies). Restricted to students in the Bachelor of Science in Nursing.

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.

Timetabled Sessions

Component	Date(s)	Time
Virtual asynchronous lecture	N/A	2 hours/week

Closed captioning or written transcripts will be provided on audio or video recordings

All course material will be posted to OWL: <https://westernu.brightspace.com/d2l/login>. 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 Brightspace Help page](#). Alternatively, they can contact the [Western Technology Services Helpdesk](#). They can be contacted by phone at 519-661-3800 or ext. 83800.

Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

5. Learning Outcomes

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

- Describe the principles that determine how pharmacological agents get into and are handled by the body.
- Describe the principles that determine how pharmacological agents act in the body to produce a pharmacological effect.
- Identify the main therapeutic actions and side effects of pharmacological agents commonly used in clinical practice.
- Discuss the clinical uses and contraindications of common pharmaceuticals

6. Course Content and Schedule

Week	Dates	Topic
1	Jan 6–12	Introduction to Pharmacology
2	Jan 13–19	Pharmacokinetics: Drug Absorption & Distribution
3	Jan 20–26	Pharmacokinetics: Drug Metabolism & Excretion
4	Jan 27–Feb 2	Pharmacodynamics
5	Feb 3–9	Analgesic Drugs: Opioids & NSAIDs
6	Feb 10–16	Lipid Lowering Drugs
7	Feb 17–23	Reading Week (starts February 15 th)
8	Feb 24–Mar 2	Drugs to Treat Hypertension
9	Mar 3–9	CNS Pharmacology I: Parkinson's, Alzheimer's, and Schizophrenia
10	Mar 10–16	CNS Pharmacology II: Epilepsy, Depression, Anxiety, and Bipolar Disorder
11	Mar 17–23	Drugs to Treat Diabetes
12	Mar 24–30	Pharmacology of Antibiotics
13	Mar 31–Apr 4	Principles of Cancer Chemotherapy

7. Participation and Engagement

- Students are expected to participate and engage with content as much as possible
- Students can participate in review and Q&A sessions that will be held before each exam
- Students can also participate by interacting in the forums with their peers and instructors

8. Assessment and Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated on the OWL Brightspace site.

Assessment	Format	Weighting	Due Date	Flexibility
PeerWise Assignment #1	<p>Author 2 original multiple-choice questions (with 4 answer options) on content from Weeks 1-3</p> <p>Answer 5 multiple choice questions in PeerWise</p>	2.5%	<p>Opens: Monday, January 6th, 2025 @ 9:00 am</p> <p>Due: Monday, January 20th, 2025 @ 11:59 pm</p>	72-hour no-late penalty

<p>Online Quiz #1</p>	<p>Online in OWL Brightspace, open-book</p> <p>Multiple choice covering content from Weeks 1-3</p> <p>A mix of questions from PeerWise Assignment #1, and others authored by Dr. Easton</p>	<p>2.5%</p>	<p>Opens: Thursday, January 30th, 2025 @ noon</p> <p>Closes: Sunday, February 2nd, 2025 @ 11:59 pm</p>	<p>If no quiz attempts are recorded, the weighting will be shifted to the Test</p>
<p>Test</p>	<p>In-person, closed-book.</p> <p>A mix of multiple choice and short answer questions.</p> <p>Material from Weeks 1-3 will be covered.</p>	<p>17.5%</p>	<p>Saturday, February 8th, 2025: 9-10 am</p> <p>Make-up: Wednesday, February 12th, 2025: 6-7 pm</p>	<p>Not applicable</p>
<p>PeerWise Assignment #2</p>	<p>Author 2 original multiple-choice questions (with 4 answer options) on content from Weeks 4-8</p> <p>Answer 5 multiple choice questions in PeerWise</p>	<p>2.5%</p>	<p>Opens: Monday, January 27th, 2025 @ 9:00 am</p> <p>Due: Monday, February 24th, 2025 @ 11:59 pm</p>	<p>72-hour no-late penalty</p>

<p>Online Quiz #2</p>	<p>Online in OWL Brightspace, open-book</p> <p>Multiple choice covering content from Weeks 4-8</p> <p>A mix of questions from PeerWise Assignment #2, and others authored by Dr. Easton</p>	<p>2.5%</p>	<p>Opens: Thursday, March 6th, 2025 @ noon</p> <p>Closes: Sunday, March 9th, @ 11:59 pm</p>	<p>If no quiz attempts are recorded, the weighting will be shifted to the Midterm</p>
<p>Midterm</p>	<p>In-person, closed-book.</p> <p>A mix of multiple choice and short answer questions.</p> <p>Material covering Weeks 1-8 will be covered</p>	<p>27.5%</p>	<p>Saturday, March 15th, 2025: 9-10:30 am</p> <p>Make-up: Wednesday, March 19th, 2025: 6-7:30 pm</p>	<p>Not applicable;</p> <p>Designated assignment</p>
<p>PeerWise Assignment #3</p>	<p>Author 2 original multiple-choice questions (with 4 answer options) on content from Weeks 9-12</p> <p>Answer 5 multiple choice questions in PeerWise</p>	<p>2.5%</p>	<p>Opens: Monday, March 3rd, 2025 @ 9:00 am</p> <p>Due: Monday, March 24th, 2025 @ 11:59 pm</p>	<p>72-hour no-late penalty</p>

Online Quiz #3	<p>Online in OWL Brightspace, open-book</p> <p>Multiple choice covering content from Weeks 9-12</p> <p>A mix of questions from PeerWise Assignment #3, and others authored by Dr. Easton</p>	2.5%	<p>Opens: Tuesday April 1st, 2025 @ noon</p> <p>Closes: Friday, April 4th, 2025 @ 11:59 pm</p>	If no quiz attempts are recorded, the weighting will be shifted to the Final Exam
Final Exam	<p>In-person, closed-book. A mix of multiple choice and short answer questions.</p> <p>Material covering Modules 1–13 will be covered</p>	40%	Date to be determined by the registrar	Not applicable

Designated Assessment: Instructors are permitted to designate one assessment per course per term as requiring supporting documentation to receive academic consideration. See below for information on academic consideration policy and missed coursework. For this course, the following assessment has been designated as requiring supporting documentation:

- The Midterm Examination:
 - Saturday, March 15th, 2025: 9-10:30 am
 - Make-up: Wednesday, March 19th, 2025: 6-7:30 pm

Information about flexibility in assessment

- Flexibility in assessment has been applied to this course; therefore, academic consideration requests may be denied on the assessments where flexibility is included
- For PeerWise assignments: Submissions received within 72 hours of the posted deadline will not be penalized
- For online quizzes: If no quiz attempts are recorded, the weighting will be shifted to the next in-person assessment.

General information about assessments

- All assignments are due at 11:59 PM Eastern Time unless otherwise specified
- For **PeerWise assignments**, please see the PeerWise tab on OWL Brightspace for detailed instructions. There are **no part marks available** for the assignment. You must author 2 original questions (with 4 answer options) and answer 5 student-authored questions to receive full marks.
- PeerWise assignments will be completed on: <https://peerwise/cs/auckland/ac/nz>

- ✓ PeerWise assignments will be **reviewed for originality** to ensure questions were authored by each student and were not shared, taken from internet resources, previous course examinations, or AI resources. If it was found that a student did not author original questions, a grade of zero will be given on that assignment.
- ✓ Students will have **TWO attempts** to complete each **online quiz**. The highest quiz score will be recorded and applied to the final course grade. Quiz questions may differ on each attempt.
- ✓ After an assessment is returned, students must 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, and in-person examinations must be received within 3 weeks of the grade being posted.
- ✓ 15% of your course grade will be evaluated and returned 3 days before the drop deadline (statement in policies below).

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 assessments:

- ✓ Late PeerWise assignments **will not be accepted**. If a complete PeerWise assignment is not received within 72 hours of the posted deadline, a grade of zero will be applied.
- ✓ There are **NO makeup quizzes**. If a student misses a quiz, the weighting of that quiz will be shifted to the next exam in the course. If you are unable to complete both quiz attempts, your first quiz attempt will be used to calculate your final grade.
- ✓ Only **ONE makeup exam** will be offered for each exam. If a student's documentation covers an absence for both the regular exam and the make-up exam, the weight of that exam will be added to the final exam in the course. Please see syllabus section 8 for tentative make-up exam dates and times.
- ✓ Any exam or makeup exam missed without approved academic consideration will receive a grade of zero
- ✓ At least **ONE of the Test and the Midterm** must be written to be permitted to write the Final Exam in the course
- ✓ At the end of the course, the **lowest exam grade will be reweighed** by reducing that exam by 2.5% and applying it to the highest exam grade. For example, if the lowest grade was on the Midterm, and the highest grade was on the Final Exam, the Midterm will be worth 25%, and the final exam will be worth 42.5%.

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

SPC (Special examination): If the Academic Advising Office has approved a student 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

Advising 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 Brightspace site every 24–48 hours
- Students should contact their instructor(s) via email and their teaching assistant(s) using the OWL Brightspace forum threads
- Instructor emails and the Brightspace forums will be monitored daily; students will receive a response in 24–48 hours Monday-Friday
- This course will use OWL Brightspace forums for course-related 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 remotely using Zoom. Details on the timing of office hours will be available on the OWL Brightspace page.
- Office hours will be in a drop-in format, no appointment is needed to attend
- Office hours will be group-based

11. Resources

- All resources will be posted in OWL Brightspace

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
- Email Dr. Easton a picture of an alpaca. Students in the course who submit a picture before January 10th, 2025, at 11:59 pm will be entered into a draw for a \$25 campus hospitality gift card as a reward for reading up to this point of the syllabus. (Hint: you will have a better chance to win if you don't tell your classmates about this)
- Students will be expected to take an academic integrity pledge before some assessments

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 are responsible for ensuring and promoting 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 Brightspace** to ensure you have seen everything posted to help you succeed in this class.
3. **Follow checklists** created on OWL Brightspace 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 lecture videos.
5. **Connect with others.** Try forming an online study group and meeting weekly 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 success. It seems easier to motivate ourselves knowing that something is waiting for us at the end of the task.

14. Western Academic Policies and Statements

A. Absence from Course Commitments

Students must familiarize themselves with the Policy on [Academic Consideration – Undergraduate Students in First Entry Programs](#)

Students missing coursework for medical, compassionate, or extenuating circumstances can request academic consideration by completing a request at the [central academic consideration portal](#). Students are permitted one academic consideration request per course per term **without** supporting documentation. Note that supporting documentation is **always** required for academic consideration requests for examinations scheduled by the office of the registrar (e.g., December and April exams) and for practical laboratory and performance tests (typically scheduled during the last week of the term).

Students should also note that the instructor may **designate** one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Academic consideration requests may be denied when flexibility in assessment has already been included. Examples of flexibility in assessment include when there are assessments not required for calculation of the final grade (e.g. 8 out of 10 quizzes) or the submission timeframe is flexible (e.g. 72 hour no late penalty period).

Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with the information presented in this course syllabus. Supporting documentation for academic considerations for absences due to illness should use the [Student Medical Certificate](#) or, where that is not possible, equivalent documentation by a health care practitioner.

Accommodation for Religious Holidays

Students should review the policy for [Accommodation for Religious Holidays](#). Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks before writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week before the midterm.

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](#).

B. 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.

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

C. 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](#)

D. 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](#).

E. 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](#).

F. Turnitin and other similarity review software

All PeerWise assignments will be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database to detect plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and [Turnitin.com](#).

G. 15% Rule

According to the [Evaluation of Academic Performance](#) policy, at least three days prior to the deadline for withdrawal from a 1000- or 2000-level course without academic penalty, students will receive assessment of work accounting for at least 15% of their final grade. Generally, students can expect some form of feedback on their performance in a course before the drop date. In rare instances, at the Dean's discretion, an exemption can be issued, which also must be noted in the course syllabus. Deans should review exemptions on a course-by-course basis each time an exempted course is offered.

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, e.g., cell phones, tablets, cameras, smart glasses, smart watch 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., 74.45 becomes 74, and 74.50 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.

Statement on the use of Generative Artificial Intelligence (AI) Platforms

Within this course, students are permitted to use AI tools exclusively for information gathering and preliminary research purposes. These tools are intended to enhance the learning experience by providing access to diverse information sources. However, it is essential that students critically evaluate the obtained information, exercise independent thinking, and engage in original research to synthesize and develop their ideas, arguments, and perspectives. The use of AI tools can serve as a starting point for exploration, with students expected to uphold academic integrity by appropriately attributing all sources and avoiding plagiarism. Submitted assignments should reflect the student's own thoughts and independent written work. By adhering to these guidelines, students contribute to a responsible and ethical learning environment that promotes critical thinking, and independent inquiry and allows them to produce original written contributions.

16. Support Services

- Students who are in emotional/mental distress should refer to Mental Health @Western Health <https://www.uwo.ca/health/> for a complete list of options about how to obtain help.
- To connect with a case manager or set up an appointment, please contact support@uwo.ca.
- Other important links:
 - [Academic Advising \(Science and Basic Medical Sciences\)](#)
 - [Appeal Procedures](#)
 - [Registrarial Services](#)
 - [Student Development Services](#)

- [Student Health Services](#)

Statement on Gender-Based and Sexual Violence

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.