

Department of Physiology and Pharmacology

Pharmacology 4370B: Drugs of Abuse

Course Syllabus for Winter 2024



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	Classes End	
Monday, January 8, 2024	Monday, April 8, 2024	
* March 7, 2024: Last day to drop a second-term half course without penalty		
Reading Week	Study day(s)	Exam Period
February 17–25	April 9-10	April 11-30

3. Contact Information



Course Coordinator	Contact Information
Peter Chidiac	pchidiac@uwo.ca

## 4. Course Description and Design

**Delivery Mode:** In person, some online components

**Prerequisite(s):** Pharmacology 3620 or Physiology 3140

**Overview:**

### **Part 1: Pharmacology of CNS drugs – general concepts**

January 9 – 23

Topics to be covered: Concepts and definitions (categories of psychoactive drugs, addiction, tolerance, dependency, side effects, toxic effects, etc.); Pharmacodynamics and drug targets; Pharmacokinetics and routes of drug administration; acute and long-term tolerance; drug withdrawal; addiction; experimental methods to study tolerance and addiction.

### **Part 2: Effects of psychoactive drugs**

January 30 – February 27

Topics to be covered: CNS depressants (ethanol, opioids, benzodiazepines, etc.); CNS stimulants; perception-altering drugs (hallucinogens, dissociatives, deliriants; cannabis).

### **Student Presentations**

March 5 – April 2

These will focus on special topics or subclasses of psychoactive drugs. Topics will be assigned and presented in reverse-alphabetical order by surname. There will be 6 presentations per week. Students will need to upload their video presentation by the preceding Wednesday for in-class online Discussion/Q&A the following Tuesday. Questions may be asked in the online Forum prior to class, orally during class, or via the Zoom chat function.

Each recorded presentation should be 15 minutes. Further instructions will be given in class.

**Participation mark:** Attendance of weekly class sessions is expected. 20% of each student's final mark will be based on class participation, including *attendance (5%)*, *contributions to class discussions (12%)*, and *peer evaluations (3%)*.

**Weekly lectures** – Scheduled lectures will occur in person and student presentation discussion weeks will occur via Zoom on Tuesdays at 9:30 (see the posted schedule below).

Student presentations (to be assigned) will take place during the final 5 weeks of the course. These will need to be **uploaded 1 week prior (Wednesday at 5 PM)** for online discussion in class time at the assigned time.

### **Timetabled Sessions**

Component	Date(s)	Time
Lecture	Tu	9:30 AM (in person)
Assigned presentations - submission	Wed ( <i>i.e.</i> , 7 days prior)	By 5 PM

Assigned presentations - discussion	Tu	9:30 AM (via Zoom)
-------------------------------------	----	--------------------

- Asynchronous pre-work must be completed prior to sessions
- Attendance at sessions is required
- A recording will be provided of each online session

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:



- explain the major factors underlying drug tolerance and substance use disorders
- understand how pharmacokinetic factors influence psychoactive drug effects
- know the major pharmacological targets of psychoactive drugs
- appreciate the interplay between the molecular, physiological, and psychological effects of psychoactive drugs
- understand the toxic effects of psychoactive drugs

## 6. Course Content and Schedule



Week	Dates	Topic
1	Jan 9	Psychoactive drugs – general concepts 1
2	Jan 16	Psychoactive drugs – general concepts 2
3	Jan 23	Class discussion and Q&A session (via Zoom)
4	Jan 30	CNS depressants
5	Feb 6	Opioid drugs, CNS Stimulants 1
6	Feb 13	CNS Stimulants 2, Perception-altering drugs 1
7	Feb 17-25	Reading Week
8	Feb 27	Perception-altering drugs 2, Cannabis
9	Mar 5	Discussion of Student Presentations (via Zoom)
10	Mar 12	Discussion of Student Presentations (via Zoom)
11	Mar 19	Discussion of Student Presentations (via Zoom)
12	Mar 26	Discussion of Student Presentations (via Zoom)
13	Apr 2	Discussion of Student Presentations (via Zoom)

## 7. Participation and Engagement



- Students are expected to participate and engage with content as much as possible
- Participation will be assessed via contributions to class discussions, contributions to Zoom chats, and postings to online forums (12%), as well as timely completion of assigned peer evaluations (3%).
- Attendance is mandatory at all lectures and student presentations (5%)

## 8. Evaluation

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

Assessment	Format	Weighting	Due Date
Midterm exam	Short answer/essay	30%	Feb 9 <sup>th</sup> (6-8 PM)
Assignments	Presentation	30%	During the term
Participation & Attendance		20%	During the term
Final Exam	Short answer/essay	20%	TBD (April 11 – 30)



- Videos of assigned presentations are due to be uploaded at 5 PM EST on the Wednesday (7 days) before the scheduled date for class discussion. There is a 24-hour grace period for upload of the presentations without penalty.
- Peer evaluations are due by 5 PM EST on the Friday after the assigned presentation
- Rubrics will be used to evaluate assessments and will be posted with the instructions
- Students are responsible for ensuring that the correct file version is uploaded; incorrect submissions including corrupt files will be subject to late penalties (see below) or a 0
- 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 assignments without accommodation will be subject to a late penalty of 10%/day.
- Attendance at all in person classes and online zoom discussions is expected. If more than 1 class is missed during the term, a deduction of 0.5% per additional class missed, from the 5% total attendance mark will be applied.
- Peer assessments cannot be submitted late and will receive a mark of 0 if not submitted on time.
- Only one make-up test will be offered.
- If the midterm and it's one scheduled makeup is missed with accommodation, then the missed exam will be reweighed to the final 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) using email or via OWL.
- Emails will be monitored daily; students will receive a response in 24–48 hours
- This course will use Zoom 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:



- No set office hours.
- Students should contact Dr Chidiac to arrange virtual or in-person meetings.

## 11. Resources



- All resources will be posted in OWL
- No required textbook or study guide

## 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
- 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 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, who will consider whether an extension is warranted. The 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 Counselling 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](#).

### **Turnitin and other similarity review software**

All 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. Students will be able to view their results before the final submission. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting 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](#).

## **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.



## Use of ChatGPT and other Artificial Intelligence (AI) Platforms Statement

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 own 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. Assignments and/or lab reports should reflect the students' own thoughts and independent written work. By adhering to these guidelines, students contribute to a responsible and ethical learning environment that promotes critical thinking, independent inquiry and allows them to produce original written contributions.

## 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](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](mailto:support@uwo.ca).

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

[Appeal Procedures](#)

[Registrarial Services](#)

[Student Development Services](#)

[Student Health Services](#)