

Winter 2023 Course Syllabus  
Drugs and the Brain (PSYC62)

Professor: Mark Morrissey, Ph.D.

**Lectures:** Tuesdays, 8-10pm- AA 112

**Course Email:** PSYC62.w2023@gmail.com

**Office hours:** One-on-one appointments - Fridays 12-1pm

Must be reserved 24 hours in advance through: <https://calendly.com/morrissey-utsc>

A note on email communication: All questions regarding the course, lectures, readings, exams, etc. must be sent to the course email address: [PSYC62.w2023@gmail.com](mailto:PSYC62.w2023@gmail.com). Questions that have already been answered in the course syllabus, in lecture slides, or on Quercus will not receive a response. Students are asked to contact Dr. Morrissey directly for personal or confidential matters only, at [mark.morrissey@mail.utoronto.ca](mailto:mark.morrissey@mail.utoronto.ca)

\*\* Please note: Course announcements will be made through Quercus. Students are responsible for monitoring the course website regularly for important announcements and updates. Class emails will also be sent through Quercus. Therefore, students are responsible for making sure that their listed email address is correct. \*\*

REQUIRED TEXTBOOK: Prus, A. (2021). *Drugs and the Neuroscience of Behavior: An Introduction to Psychopharmacology* (3rd ed.).

Cengage Learning.

**COURSE DESCRIPTION:** The objective of this course is to provide a comprehensive overview of neuropsychopharmacology. This interdisciplinary science examines the neurobiological and behavioural mechanisms that underlie psychoactive drug use, abuse, and dependence. We will cover the principles of pharmacology (pharmacodynamics, pharmacokinetics, and pharmacogenetics), neurobiological mechanisms of drug action; and behavioural psychopharmacology. Several lectures will focus on specific drugs with an emphasis on their mechanisms of action, what they tell us about the brain, and clinical relevance. The concepts of

physical and psychological dependence, tolerance, sensitization, and reinforcement and aversion will also be covered.

**COURSE OBJECTIVES:**

1. Describe and understand the fundamental aspects of pharmacology.
2. Review the basics of neuroanatomy and neural transmission.
3. Describe the Psychology and Physiology of drug seeking behaviour and drug addiction.
4. Cover the main categories of drugs, their individual pharmacology and their influence on our Neuropsychology.
5. Demonstrate an understanding of how the study of drug action advances our understanding of brain function.
6. Demonstrate a good understanding of how drugs produce behavioural effects through their physiological effects in the central nervous system.

**Prerequisite:**

[ [PSYB07H3](#) or [STAB22H3](#) or [STAB23H3](#)] and [at least 0.5 credit from the following: [PSYB64H3](#), [PSYB55H3](#), ([PSYB65H3](#)), [NROB60H3](#)] and [an additional 0.5 credit at the B-level or C-level in PSY or NRO courses]

**Exclusion:**

PSY396H, PCL475Y

**COURSE STRUCTURE** The format of the course will consist primarily of lectures, but will also include video and other methods to help illustrate course material. The material covered in lectures will generally correspond to the material in the textbook, but will often serve to supplement the readings rather than simply duplicate their contents. Therefore, I strongly recommend having completed the relevant readings prior to watching the accompanying online lecture; having done so will make the learning experience more enjoyable and productive. I will also present material that is not included in the readings; therefore, familiarity with both lectures and course readings is necessary to succeed in this course. You will be responsible for all material presented in class and in the required readings.

Quiz 1	5%	Week 4
Mid-term Exam	30%	TBA
Drug Paper	15%	Due March 20
Quiz 2	5%	Week 8
Quiz 3	5%	Week 13
Quercus Discussion	5%	Choose 3/11 Discussion Questions
Final Exam	35%	April Exam period

**QUIZZES, TERM TEST AND FINAL EXAM**

mTuner quizzes (5% each): Students will be required to complete two closed-book online quizzes during the semester. These quizzes will be taken online with mTuner. mTuner allows for enhanced online multiple-choice tests specifically designed to help promote students' learning and understanding of the course material. The quizzes are designed to help students keep up with the course material and be prepared for the mid-term and the

final exam. No extensions will be granted for completing the quizzes. All quizzes are **closed-book**. Specific details about the mTuner quizzes will be provided on Quercus.

- Quiz 1: Will take place during week 4 (Thursday 10am-Friday 10pm) and will cover material from weeks 1-3.
- Quiz 2: Will take place during week 8 (Thursday 10am-Friday 10pm) and will cover material from Weeks 4-7.
- Quiz 3: Will take place during week 13 (Thursday 10am-Friday 10pm) and will cover material from Weeks 8-12.

**Mid-term examination (30%):** The mid-term exam will cover all required readings and lecture material covered before the mid-term. The exam will consist primarily of multiple-choice questions, with a few short answer questions, will not exceed two hours and **closed-book**. The exam will be scheduled by the registrar.

**Final examination (35%):** The final exam will be cumulative. It will cover all course material however **an emphasis will be placed on material covered after the mid-term**. The exam will consist of multiple-choice questions, will not exceed two hours, and be closed-book. The final exam will be scheduled during the University examination period.

**Drug Paper (15%):** You will be required to choose a drug to focus on for a brief (4-5 page) research report. Details will posted on Quercus. The paper is to be submitted by March 20, 11:59pm to Quercus Assignments.

Late submissions will be assessed late penalties according to the following schedule. 2.5% per day for the first two days. 5% per day for each following day.

Papers will be submitted online through the Quercus Assignments page and will be passed through plagiarism detection.

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>).

**Quercus Discussion (5%):** Each week the TA will hold a virtual Discussion session around 1 question that relates to the previous weeks content. All students are required to respond to 3 of these questions by the end of the term in the Quercus Discussion section. The sum of your three responses will be assigned a grade of 0-7.5 depending on the thought and effort put into each response. All answers will be due April. Any answers submitted after this date will not be graded. You are encouraged to attend the virtual session to discuss and to submit your answers as you complete them.

### **Quercus:**

This course uses the University's learning management system, Quercus, to post information about the course. This includes posting readings and other materials required to complete class activities and course assignments, as well as sharing important announcements and updates. The site is dynamic and new information and resources will be posted regularly as we move through the term, so please make it a habit

to log in to the site on a regular, even daily, basis. To access the course website, go to the U of T Quercus log-in page at <https://q.utoronto.ca>. Once you have logged in to Quercus using your UTORid and password, you should see the link or "card" for *Drugs and the Brain PSYC62*. You may need to scroll through other cards to find this. Click on the *Drugs and the Brain PSYC62* link to open our course area, view the latest announcements and access your course resources. There are Quercus help guides for students that you can access by clicking on the "?" icon in the left side column.

**SPECIAL NOTE ABOUT GRADES POSTED ONLINE:** Please also note that any grades posted are for your information only, so you can view and track your progress through the course. No grades are considered official, including any posted in Quercus at any point in the term, until they have been formally approved and posted on ACORN at the end of the course. Please contact me as soon as possible if you think there is an error in any grade posted on Quercus.

## Department of Psychology Missed Term Work Policy

For missed term work (assignments and term tests) due to illness, emergency, or other mitigating circumstances, please follow the procedures outlined below.

Note:

- The following reasons are not considered sufficient for missed term work: travel for leisure, weddings, personal commitments, work commitments, human error.
- [Missed Final Exams](#) are handled by the Registrar's Office and should be declared on eService.
- Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, accommodations are only possible via the Registrar's Office [petition process](#).

Typical accommodations for missed term work that follow proper procedure and are approved are:

- mTuner: re-weighting of quiz to the remaining quizzes (or final exam if the 3<sup>rd</sup> mTuner is missed)
- Drug paper: time extensions based on submitted forms
- Mid-term: writing of make-up midterm
- Make-up midterm: re-weighting to final exam
- Discussion assignment: re-weighted to final exam
- Final exam: Writing of deferred exam (handled by the registrar and not the course)

The email address to submit missed term work accommodation requests is:  
**PSYC62.w2023@gmail.com**

### **ILLNESS OR EMERGENCY accommodations:**

For missed work due to ILLNESS OR EMERGENCY, complete the following process:

1. Complete the [Request for Missed Term Work Accommodations Form](#).
2. Declare your absence on [ACORN](#) (Profile & Settings > Absence Declaration)
3. Email **both** of the following items to the course email **WITHIN 2 BUSINESS DAYS** of the missed work:
  - the [Request for Missed Term Work Accommodations Form](#)
  - **\*AND\***
  - a screenshot of your Self-Declared Absence on ACORN

Note:

- *If you are unable to submit your request within 2 business days, you must still email your instructor within the 2 business day window to explain the nature of the delay. Exceptions to the 2 business day deadline will only be made under exceptional circumstances.*
- *If your absence is declared on ACORN, we do not require any additional supporting documentation (e.g. medical notes) to support your missed term work accommodation request.*

### **ACADEMIC CONFLICT accommodations:**

For missed term work due to an ACADEMIC CONFLICT (e.g. two midterms at the same time):

1. Complete the [Request for Missed Term Work Accommodations Form](#).
2. Take screenshots of your course Quercus pages that demonstrate the conflict.
3. Email the form and screenshots to the course email **at least two weeks (10 business days) before the date of the activity**, or as soon as possible if it was not possible to identify the conflict earlier. Requests sent after the activity deadline may not be accommodated.

#### Note:

- *Multiple assignments due on the same day are not considered conflicts. Students are expected to manage their time effectively to meet assignment deadlines.*
- *Back-to-back tests/quizzes are not considered conflicts. Only overlapping activities are conflicts.*
- *Students are responsible for keeping their course timetables conflict-free. Students who register in two courses with overlapping lecture/tutorial/lab schedules will not be accommodated.*

### **RELIGIOUS CONFLICT accommodations:**

For missed term work due to a RELIGIOUS CONFLICT:

1. Complete the [Request for Missed Term Work Accommodations Form](#).
2. Email the form to the course **email at least two weeks (10 business days) before the date of the activity**, or as soon as possible if it was not possible to identify the conflict earlier. Requests sent after the activity deadline may not be accommodated.

### **ACCESSABILITY SERVICES accommodations:**

For missed **TERM TESTS** due to ACCESSABILITY REASONS:

- **Contact your AccessAbility consultant** and have them email the course email detailing accommodations required.

For missed **ASSIGNMENTS** due to ACCESSABILITY REASONS:

- If your desired accommodation is **within the scope** of your Accommodation Letter (e.g. your letter includes “extensions of up to 7 days” and you need 3 days):
  1. Complete the [Request for Missed Term Work Accommodations Form](#).
  2. Email the form **\*AND\*** your **Accommodation Letter** to the course email specifying how many days extension you are requesting.
- If your desired accommodation is **outside the scope** of your Accommodation Letter (e.g. your letter includes “extensions of up to 7 days” but you need more time than that):
  1. **Contact your AccessAbility consultant** and have them email the course email detailing the accommodations required.

### **Accommodation Procedure:**

After submitting your documentation, you will receive a response from your instructor or TA. This form does not guarantee that you will be accommodated. The course instructor reserves the right to decide what accommodations (if any) will be made. Failure to adhere to any aspect of this policy may result in a denial of your request. **You are responsible for checking your official U of T email and Quercus course announcements daily**, as accommodations may be time-critical.

For missed assignments, **do not wait for the instructor’s response to resume work on your assignment**. Extensions may be as short as one business day, depending on the nature of the illness/emergency. Complete your assignment as soon as you’re able, and email it to your instructor.

For an **anticipated absence** (e.g. a scheduled surgery or an illness with a prolonged recovery period), if you would like to request accommodations in advance, submit a [Verification of Illness Form](#) completed by your doctor AND the [Request for Missed Term Work Accommodations Form](#) to the course email. Absences can be declared up to 14 days into the future on ACORN.

### **Missed Accommodations**

If an accommodation is granted but a continued illness/emergency prevents you from meeting its requirements, you must repeat the missed term work procedure to request additional accommodations.

**Please make it clear in your subject line that you are requesting a second accommodation.** E.g. If you are given an extension but are still sick and need more time, or if you miss a make-up term test, you must submit *another* [Request for Missed Term Work Accommodations Form](#) and declare your extended absence on ACORN. \*Note: In the case of a missed make-up test, an opportunity to write a second make-up test may not necessarily be provided.

## Disability-Related Accommodations

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office (<http://www.utoronto.ca/ability/>) as soon as possible.

AccessAbility Services staff (located in Rm AA142, Arts and Administration Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. Please contact 416-287-7560 (tel/TTY) or email [ability.utoronto.ca](mailto:ability.utoronto.ca) for more information.

The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

## Academic Integrity

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment. On tests and exams cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

## Religious Accommodations

The University has a commitment concerning accommodation for religious observances. I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory holidays. According to University Policy, if you anticipate being absent from class or missing a major course activity (like a test, or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

## Equity, Diversity, Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

## COURSE SCHEDULE

<b>Lecture Date</b>	<b>Lecture Topic</b>	<b>Readings</b>
Week 1 (Jan 10)	Introduction to Neuropsychopharmacology	Chapter 1
Week 2 (Jan 17)	Neuroanatomy	Chapter 2
Week 3 (Jan 24)	Neurotransmission	Chapter 3
Week 4 (Jan 31)	Properties of Drugs	Chapter 4
Week 5 (Feb 7)	Drugs of abuse	Chapter 5
Week 6 (June 13)	Psychostimulants	Chapter 6
Week 7 (Feb 20-24)- READING BREAK		
Week 8 (Feb 28)	Nicotine, and Caffeine	Chapter 7
Week 9 (Mar 7)	Ethanol	Chapter 8
Week 10 (Mar 14)	Depressants	Chapter 9
Week 11 (Mar 21)	Opioids	Chapter 10
Week 12 (Mar 28)	Cannabinoids	Chapter 11

Week 13 (Apr 4)	Psychedelic Drugs & Psychotropic Therapy	Chapters 12-15
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\*Please note that this outline is subject to change depending on the needs of the class (we may need additional time to cover a topic). Any changes to the syllabus will be announced ahead of time. However, the test dates will be fixed.



**Grade  
Scale**

NUMERICAL MARKS	LETTER GRADE	GRADE POINT VALUE
90 - 100%	A+	4.0
85 - 89%	A	4.0
80 - 84%	A-	3.7
77 - 79%	B+	3.3
73 - 76%	B	3.0
70 - 72%	B-	2.7
67 - 69%	C+	2.3
63 - 66%	C	2.0
60 - 62%	C-	1.7
57 - 59%	D+	1.3
53 - 56%	D	1.0
50 - 52%	D-	0.7
0 - 49%	F	0.0