# Summer 2020 Course Syllabus Drugs and the Brain (PSYC62)

Instructor: Mark Morrissey, Ph.D.

**Online Lectures:** Available via Quercus. Lectures will be posted Wednesday evenings each week.

Teaching Assistants: Bilgehan Cavdaroglu, Matt McPhee, Sylvia Romanowska, Jennifer Wilkin

Course Email: PSYC62.summer.2020@gmail.com

#### **Instructor Office Hours:**

One-on-one appointments: Sundays 7-8pm

Must be reserved 24 hours in advance through <a href="https://calendly.com/utsc-summer-2020">https://calendly.com/utsc-summer-2020</a>
Open chats: Drop in group chats Wednesdays 730-8pm <a href="https://us02web.zoom.us/j/2664791524">https://us02web.zoom.us/j/2664791524</a>

A note on email communication: All questions regarding the course, lectures, readings, exams, etc. must be sent to the course email address: PSYC62.summer.2020@gmail.com . Questions that have already been answered in the course syllabus, in lecture slides, or on Blackboard will not receive a response. Students are asked to contact Dr. Morrissey directly for personal or confidential matters, at 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 TEXBOOK: Prus, A. (2017). *Drugs and the Neuroscience of Behavior: An Introduction to Psychopharmacology* (2nd 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:**

[ <u>PSYB07H3</u> or <u>STAB22H3</u> or <u>STAB23H3</u>] and [at least 0.5 credit from the following: <u>PSYB64H3</u>, <u>PSYB55H3</u>, (<u>PSYB65H3</u>), <u>NROB60H3</u>] 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 of June 1
Mid-term Exam	30%	TBA
Drug Paper	15%	Due July 29
Quiz 2	5%	Week of Aug 3
Quercus Discussion	5%	Choose 3/5 Discussion Questions
Final Exam	40%	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. Specific details about the mTuner quizzes will be provided on Quercus.
- Quiz 1: Will take place during the week of June 1st, 2020 (exact timing TBA) and will cover weeks 1-4
- Quiz 2: Will take place during the week of Aug 3rd, 2020 (exact timing TBA) and will cover Weeks 9-11.
- 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 (40%): 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 July 29.
- Quercus Discussion (5%): Throughout the semester, 5 Discussion questions will be posted on the Quercus discussion board. All students are required to respond to 3 of these questions. The sum of your three responses will be assigned a grade of 0-5 depending on the thought an effort put into each response. More details will be provided on Quercus.

Lecture Date	Lecture Topic	Readings
Week 1 (May 11)	Introduction to Neuropsychopharmacology	Chapter 1
Week 2 (May 18)	Neuroanatomy	Chapter 2
Week 3 (May 25)	Neurotransmission	Chapter 3
Week 4 (June 1)	Properties of Drugs	Chapter 4
Week 5 (June 8)	Drugs of abuse	Chapter 5
Week 6 (June 15)	Psychostimulants	Chapter 6
READING WEEK (June 23-27)	Reading week- No class	NA
Week 7 (June 29)	Nicotine, and Caffeine	Chapter 7
Week 8 (July 6)	Ethanol	Chapter 8
Week 9 (July 13)	GHB, Inhalants, Anesthetics	Chapter 9
Week 10 (July 20)	Opioids	Chapter 10
Week 11 (July 27)	Cannabinoids & Psychedelic Drugs	Chapters 11-12

Week 12 (Aug	Psychotropic Therapy	Chapters 13-15
3)		

<sup>\*</sup>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.

## **Policies for Missed Term Work**

All students citing a documented reason for missed term work must submit their request for accommodations within three (3) business days of the deadline for the missed work. Submit via email to: Keely Hicks, Departmental Assistant, keely.hicks@utoronto.ca

Students must submit BOTH of the following: (1.) A completed Request for Missed Term Work Accommodations form (http://uoft.me/PSY-MTW), and

(2.) Appropriate documentation to verify your illness or emergency, as described below.

## Appropriate documentation:

For missed ASSIGNMENTS or TERM TESTS due to FLU-LIKE SYMPTOMS or SELF-ISOLATION REQUIREMENTS: • Email the Request for Missed Term Work Accommodations form (uoft.me/PSY-MTW) to Keely (keely.hicks@utoronto.ca), and • Declare your absence on ACORN (Profile & Settings > Absence Declaration)

For missed ASSIGNMENTS due to OTHER ILLNESS: • Email the Request for Missed Term Work Accommodations form (uoft.me/PSY-MTW) to Keely (keely.hicks@utoronto.ca, along with the Self-Declaration of Student Illness Form (uoft.me/PSY-self-declare-form).

For missed TERM TESTS due to OTHER ILLNESS: · Email the Request for Missed Term Work Accommodations form (uoft.me/PSY-MTW) to Keely (keely.hicks@utoronto.ca), along with a scan/photo of the original copy of the official UTSC Verification of Illness Form (uoft.me/UTSC-Verification-Of-Illness-Form) or an original copy of the record of visitation to a hospital ER.

- · Forms are to be completed in full, clearly indicating the start date, anticipated end date, and severity of illness. The physician's registration # and business stamp are required.
- · Note: If an end date of "ongoing" is specified, the medical note will be assumed to cover a period of two weeks. If no end date / an "unknown" end date is specified, the note will be assumed to cover a period of three business days (starting from illness start date.)

For missed TERM TESTS due to ACCESSABILITY REASONS: • Meet with your AccessAbility consultant and have them email Keely (keely.hicks@utoronto.ca) detailing accommodations required.

For missed ASSIGNMENTS due to ACCESSABILITY REASONS:

- · If your desired accommodation is within the scope of your Accommodation Letter (ex. your letter includes "extensions of up to 7 days" and you need 1-7 more days), email the Request for Missed Term Work Accommodations form (uoft.me/PSY-MTW) to Keely (keely.hicks@utoronto.ca), and attach a copy of your letter. Specify how many days extension you are requesting in your email.
- · If your desired accommodation is outside the scope of your Accommodation Letter (ex. your letter includes "extensions of up to 7 days" but you need more time than that) you will need to meet with your AccessAbility consultant and have them email Keely (keely.hicks@utoronto.ca) detailing the accommodations required.

For missed ASSIGNMENTS or TERM TESTS in OTHER CIRCUMSTANCES: Email the Request for Missed Term Work Accommodations form (http://uoft.me/PSY-MTW) form to Keely (keely.hicks@utoronto.ca), along with:

- · For the death of a family member/friend, provide a copy of the death certificate.
- · For U of T varsity-level or professional athletic commitments, an email from your coach or varsity administrator should be sent directly to Keely (keely.hicks@utoronto.ca) well in advance of the missed work, detailing the dates and nature of the commitment. · For religious accommodations, please email Keely (keely.hicks@utoronto.ca) well in advance of the missed work. · For circumstances outside of these guidelines, please email Keely (keely.hicks@utoronto.ca) on or before the date of the test / assignment deadline to describe your circumstances and determine appropriate documentation.

Documents covering the following situations are NOT acceptable: medical prescriptions, personal travel, weddings, personal/work commitments.

As stated above, your documents must be submitted within three (3) business days of the deadline for the missed work.

After submitting your documentation:

Within approximately one to five business days, you will receive a response from your instructor detailing the accommodations to be made (if any).

You are responsible for checking your official U of T email and Quercus course announcements daily, as accommodations may be time-critical.

You should continue to work on your assignments to the best of your ability, as extension accommodations may be as short as one business day, depending on the nature of the illness/emergency.

If an accommodation has been granted but you are unable to meet the conditions of the accommodation (ex. you need a longer extension, or you missed a make-up test), you will need to repeat the missed term work procedure and submit additional forms to request further accommodation. Note that in the case of a missed make-up test, an opportunity to write a second make-up test may not be provided.

Completion of this form does NOT guarantee that accommodations will be made. 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 for accommodation.

#### Missed Accommodations

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

(E.g.) If you miss a make-up midterm, you would need to submit another Request for Missed Term Work Accommodations form. If your original medical note / documentation included the date of the make-up midterm, then only the Request form is required. If the date of the make-up midterm fell outside of the dates indicated on your original medical note/other documentation, then a new medical note/other appropriate documentation must also be submitted.

Importance of Three Business Day window:

If you are unable to submit your documents within the three business day window, you must email Keely (keely.hicks@utoronto.ca) within the three business day window to explain the nature of the delay, and when you will be able to provide your documents. Exceptions to the documentation deadline will only be made under exceptional circumstances.

NOTE: Assignments due at end of term

Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, you would need to file a petition with the Registrar's Office (https://www.utsc.utoronto.ca/registrar/term-work).

**NOTE: Final Exams** 

This policy applies only to missed assignments and term tests. Missed final exams are handled by the Registrar's Office (http://www.utsc.utoronto.ca/registrar/missing-examination).

## **Rights and Responsibilities**

## **Copyright in Instructional Settings:**

If a student wishes to tape-record, photograph, video-record or otherwise reproduce lectures, course notes/slides, or other similar materials provided by instructors, he or she must obtain the instructor's <u>written consent</u> beforehand. Without consent, all such reproduction is an infringement of copyright and is absolutely prohibited. In the case of private use by students with disabilities, the instructor's consent will not be unreasonably withheld.

## **Accessibility:**

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 as soon as possible.

AccessAbility Services staff (located in Rm SW302, Science Wing) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email ability@utsc.utoronto.ca. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Students working with the Access Ability office who require accommodations for the mTuner quizzes are asked to notify us as early as possible in the semester, and no later than two weeks before the first quiz, in order to allow sufficient time to set up a modified online quiz.

## **Academic Integrity:**

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, 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/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- 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:

- Using or possessing unauthorized aids;
- Looking at someone else's answers during an exam or test;
- Misrepresenting your identity; and
- When you knew or ought to have known you were doing it.

#### In academic work:

- Falsifying institutional documents or grades;
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes; and
- When you knew or ought to have known you were doing so.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If students have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, they are expected to seek out additional information on academic integrity from their instructors or from other institutional resources.

#### *Note:*

You may see advertisements for services offering grammar help, essay editing and proof-reading. Be very careful. If these services take a draft of your work and significantly change the content and/or language, you may be committing an academic offence (unauthorized assistance) under the *Code of Behaviour on Academic Matters*.

It is much better and safer to take your draft to the Writing Centre as early as you can. They will give you guidance you can trust. Students for whom English is not their first language should go to the English Language Development Centre.

If you decide to use these services in spite of this caution, you <u>must</u> keep a draft of your work and any notes you made before you got help and <u>be prepared to give it to your</u> instructor on request.

## **UTSC Missed Final Examination Policy:**

From the UTSC Registrar's Office: "Students are expected to write their final examinations at the end of their courses and are strongly discouraged from missing a final examination. Very occasionally, students encounter circumstances where it is impossible for them to write a final examination; for example, because of a serious illness or the death of a close family member. If you are ill or other circumstances absolutely prevent you from attending a final examination, you may petition (with supporting documentation) for permission to defer writing it until a later date. In most cases deferred exams will be written in the next final examination period or in the study break that immediately precedes it. However, students should be aware that deferred exams can be scheduled at any time during the following session."

## 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%	В	3.0
70 - 72%	B-	2.7
67 - 69%	C+	2.3
63 - 66%	С	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