

DRUGS AND THE BRAIN

PSYC62H3 Winter 2019

Instructor

Zachariah Campbell

Teaching Assistants

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Lectures

Fridays 10AM-12PM AA112 WebOption

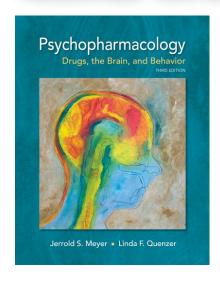
Office Hours

Fridays 12PM-1PM SY142

COURSE OBJECTIVE

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 and the neurobiological mechanisms of drug action. The concepts of dependence (physical and psychological), tolerance, sensitization, reinforcement and aversion will also be covered. Finally, an examination of therapeutic agents (psychotropic medication) and cognitive enhancers will also be examined at length.

REQUIRED TEXTBOOK & COURSE MATERIALS



Meyer, J. S. & Quenzer, L. F. (2019). **Psychopharmacology: Drugs, the Brain, and Behaviour** (3rd ed.). Oxford University Press.

All announcements and course materials including lecture slides, additional readings, links to media, and midterm grades will be made available exclusively on Quercus.

CONTACT INFORMATION

All course related inquiries are to be made through the messaging system on Quercus (Canvas LMS).

Students also must use their academic email account (i.e., utsc or utoronto email) to abide by University policy and avoid fraudulent representation of your person.

IMPORTANT NOTES

Prerequisites & Exclusions

Prerequisite: [PSYB07H3 or its equivalent] and [at least 0.5 credit from PSYB64H3, PSYB55H3, PSYB65H3 or NROB60H3] and [one additional Blevel or C-level half credit in PSY or NRO]. Exclusions: PSY396H and PCL475Y.

AccessAbility Resources

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 Room 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.

SESSIONAL DATES

| Dates | Detail |
|----------------|---|
| January 7 | Winter Session classes begin |
| January 20 | Last day to add S courses |
| February 18 | Family Day holiday (University closed) |
| February 16-22 | Reading Week (No classes held) |
| March 24 | Last day to drop S courses without academic penalty |
| April 5 | Last day of classes and last day for submission of term |
| | assignments in S and Y courses |
| | Last day to add or remove CR/NCR for S courses |
| | Last day to drop S & Y courses with a LWD transcript indication |
| April 6-9 | Study break |
| April 10-27 | Final examination period |

EVALUATIVE COMPONENTS

Term Tests & Final Examination

There will be two (2) term tests held outside of class (yet to be scheduled by the Office of the Registrar). The second term test is non-cumulative. **Note: the first midterm may take place as early as the week of Monday, February 4.**

A final examination will be administered during the UTSC Final Examination Period. It will be primarily based on material not evaluated by either term test, but a smaller proportion of questions will be cumulative in nature.

The exact weight (%) and content coverage of each term test and the final examination will be determined once the Office of the Registrar sets the date of each term test. They will collectively contribute to 90% of the final grade.

Written Assignment

For the written assignment, a psychopharmacological problem will be proposed wherein you are required to provide a unique solution based on the knowledge you will acquire throughout the course. The details for this assignment will be posted after the first term test.

The maximum length of this assignment (beyond the cover page) is ONE page, single-spaced using 12-point times new roman font and 1-inch margins. Anything longer and you will be given a grade of 0% on this assignment. All submissions will go through Quercus and turnitin.com.

Normally, students will be required to submit their course essays to Turnitin.com 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 Turnitin.com reference database, where they will be used solely to detect instances of plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

The assignment is worth 10% of your final grade in the course and is due Friday, April 5, 2019 at 11:55 PM on Quercus. Late submission will result in a deduction of 10% per day. No submissions will be accepted after April 12th.

MISSED TERM WORK DUE TO A MEDICAL ILLNESS OR OTHER EMERGENCY

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.

Students must submit **BOTH** of the following:

- A completed Request for Missed Term Work form (http://uoft.me/PSY-MTW), and
- 2. **Appropriate documentation** to verify your illness or emergency, as described below.

Appropriate Documentation

For missed **TERM TESTS** due to **ILLNESS**:

• Submit the Request for Missed Term Work Accommodations form (http://uoft.me/PSY-MTW), along with an **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 emergency room. Forms are to be completed in full, clearly indicating the start date, anticipated end date, and severity of illness. The physician's registration number and business stamp are required.

For missed **ASSIGNMENTS** due to **ILLNESS**:

Submit the Request for Missed Term Work Accommodations form (http://uoft.me/PSY-MTW), along with a hardcopy of the Self-Declaration of Student Illness Form (uoft.me/PSY-self-declare-form).

For missed term tests or assignments in **OTHER CIRCUMSTANCES**:

- In the case of a death of a family member or friend, please provide a copy of the death certificate.
- In the case of a **disability-related concern**, if your desired accommodation is within the scope of your Accommodation Letter, please attach a copy of your letter. If your desired accommodation is outside the scope of your Accommodation Letter (ex. If your letter says "extensions of up to 7 days" but you need more time than that) you will need to meet with your consultant at AccessAbility Services and have them email Keely Hicks (keely.hicks@utoronto.ca) detailing the accommodations required
- For U of T Varsity athletic commitments, an email from your coach or varsity administrator should be sent directly to Keely Hicks (<u>keely.hicks@utoronto.ca</u>) well in advance of the missed work, detailing the dates and nature of the commitment.
- For **religious accommodations**, please email (<u>keely.hicks@utoronto.ca</u>) **well in advance** of the missed work.

MISSED TERM WORK DUE TO A MEDICAL ILLNESS OR OTHER EMERGENCY (continued)

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

Procedure:

Submit your (1.) <u>request form</u> and (2.) <u>medical/self-declaration/other documents in</u> person **WITHIN 3 BUSINESS DAYS** of the missed test or assignment.

Submit to: Keely Hicks, Room SW420B, Monday - Friday, 9 AM - 4 PM

Exceptions to the documentation deadline will only be made under exceptional circumstances. If you are unable to meet this deadline, you must email Keely Hicks (keely.hicks@utoronto.ca) within the three business day window to explain when you will be able to bring your documents in person. Attach scans of your documentation.

Within approximately one week, you will receive an email 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.

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.

Instructors cannot accept term work after April 12, 2019. Beyond this date, you would need to file a petition with the Registrar's Office to have your term work accepted (https://www.utsc.utoronto.ca/registrar/term-work).

Note that 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).

STATEMENT ON 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 must keep a draft of your work and any notes you made before you got help and be prepared to give it to your instructor on request.

COURSE SCHEDULE

| Lecture | Week | Lecture Topic | Readings |
|---------|--------|---|--------------|
| Jan 11 | Week 1 | Principles of Psychopharmacology | Chapter 1 |
| Jan 18 | Week 2 | Neuronanatomy: Structural and Functional Neurotransmission | Chapters 1-3 |
| Jan 25 | Week 3 | Hormones Research Methods | Chapter 3-4 |
| Feb 1 | Week 4 | NT1: Catecholamines & Serotonin | Chapters 5-6 |

Note: Midterm 1 will take place outside of class time. Please note that it may be scheduled as early as Monday, February 4. Testable content will include lectures and assigned material up to the scheduled date. This date is yet to be determined by the Office of the Registrar and will be announced on Quercus once known to the instructor.

| Feb 8 | Week 5 | NT2: Acetylcholine, Glutamate & GABA | Chapters 7-8 |
|--------|--------|--|----------------|
| Feb 15 | Week 6 | Drug Abuse and Addiction Alcohol | Chapters 9-10 |
| Feb 22 | | Reading Week (no classes) | Chapters 11-12 |
| Mar 1 | Week 7 | Opioids Stimulants I: Cocaine, Amphetamine, etc | |
| Mar 8 | Week 8 | Stimulants II: Nicotine & Caffeine Cannabinoinds | Chapters 13-14 |

Note: Midterm 2 will also take place outside of class time <u>and may be scheduled as early</u> <u>as Monday, March 4</u>. Testable content will be based on the actual date scheduled and any material that was not evaluated by Midterm 1.

| Mar 15 | Week 9 | Psychedelics Inhalants, GHB, Steroids | Chapters 15-16 |
|--------|---------|---|----------------|
| Mar 22 | Week 10 | Anxiolytics Antidepressants & Mood Stabilizers | Chapters 17-18 |
| Mar 29 | Week 11 | Antipsychotics Rx for varied Neurological Disorders | Chapters 19-20 |
| Apr 5 | Week 12 | Course review | |