



PSYD35 LEC01 Clinical Psychopharmacology

Online, Winter 2021

Contact Information

Instructor: Dr. Taryn E. Grieder, M.Ed., Ph.D.

Contact: taryn.grieder@utoronto.ca

Office hours: After class, and by appointment

Course information: This is an online, synchronous course. Lectures will be delivered online synchronously on **Mondays from 9:10-11 am**. Students may participate in the live Zoom sessions synchronously or listen to a recording of the meeting (asynchronously). Students need the ability to read and edit PDFs or Powerpoint slides, and use Quercus for submission of discussion posts, the assignments and timed assessments. All course assessments will be conducted online.

Course Description, Goals, and Prerequisites

Course Description: This course will examine psychoactive drugs and how they affect the brain and behaviour. The course emphasizes the mechanisms by which drug use modifies brain function and behaviour, and examines the major neurobiological, psychological and sociocultural factors that influence drug use. Neurotransmitter systems and their role in certain psychological disorders and their pharmacological treatments will be examined.

Intended Learning Outcomes: Students successfully completing this course will be able to

1. Describe the major neurobiological and behavioural actions of the main classes of drugs of abuse.
2. Describe the neurobiological mechanisms through which the various categories of drugs are psychoactive and capable of producing dependence.
3. Define addiction, abuse, dependence, withdrawal and tolerance as these terms apply to drug use.
4. Describe the various neurotransmitter systems and neurochemical mechanisms underlying several clinical neuropsychiatric conditions (e.g., schizophrenia, depression, anxiety, ADHD, Alzheimer's disease), and describe psychopharmacological approaches to treat these conditions.
5. Identify variables (motivational, genetic, behavioural) that contribute to drug-seeking behaviour and relapse.
6. Identify the common experimental methodologies and approaches (clinical, animal, cellular, molecular) used in the study of drugs and behaviour.

Note about prerequisites: It is your responsibility to ensure that you have met **all** prerequisites listed in the Psychology section of the A&S Calendar for this course. If you lack any prerequisites you WILL BE REMOVED. No waivers will be granted.

Reading Material

The recommended (but not required) textbooks for this course are:

1. Meyer JS, Quenzer LF (2018). *Psychopharmacology: Drugs, the Brain, and Behavior*. (3rd Ed.). Sinauer Associates, Inc.
2. Hancock, S.D. & McKim, W.A. (2018). *Drugs and Behavior: An Introduction to Behavioral Pharmacology*. (8th Ed.). New York: Pearson.

Course Evaluation/Marking Scheme

Participation – 10% - ongoing

Commentary Assignment - 20% - February 8th

Midterm Assessment - 25% - March 1st

Case Study Assignment - 20% - March 29th

Final Assessment - 25% - TBA (April 13-23)

Lectures: Lectures will be delivered online synchronously on Mondays from 9:10-11 am. Both PowerPoint slides and PDF files will be posted along with a Zoom meeting link prior to 9 am Mondays. This meeting will be recorded and posted for asynchronous viewing. Lecture recordings are only for the exclusive use of enrolled students, for their personal learning. Lecture recordings are not to be shared in any way beyond enrolled students.

Participation (10%): There will be short participation assignments given in each lecture, to be completed and submitted on Quercus. For example, students will read an article or watch a video related to a topic covered in class and apply the course material to their reflection/response. Students will have until 11:59 pm on the following day (see course schedule below) to respond to these discussion questions on Quercus.

Case Study Assignment (20%): A case study is an in-depth analysis of a single person. Case studies are often used in clinical settings to increase understanding of predisposing factors and to explore potential treatments. They provide a very detailed description of the person and make links to theory and research as necessary. You will choose a person (real or fiction) and pick one of the substances used by your case and identify the drug category it belongs to, the impact on the nervous system and the psychological impact on the user. Please see the commentary assignment outline for further details, which is available for download on Quercus.

Commentary Assignment (20%): The journal club commentary assignment is a written review/commentary on a recent original research article (aka experimental study, which will have methods and results sections) of your choice that examines an issue related to the course (ie. is an experiment that produced new research on health psychology). Please see the commentary assignment outline for further details, which is available for download on Quercus.

Online assessments (2 x 25%): There will be midterm and final assessments in this course. The assessments will have a combination of multiple choice and written response questions (with a strict word limit). The written response questions will ask you to think critically about course themes, connect topics in the course, and/or apply what you have learned to case studies. On the release day you will have a set amount of time (~3 hours) to complete the assessment, individually, using your lecture slides and notes only, and writing in *your own words*. You will not need to provide citations and should not be using any outside sources. The assessments are not cumulative and will cover lecture material only (this means that there will

not be any questions from the recommended (not required) textbooks that were not discussed in lectures). It is expected that students will use their OWN notes from lecture to assist in their writing the tests, which will be more about your ability to *apply* your knowledge than rote memorization and regurgitation of facts from lecture.

Course Outline/Schedule

Every effort will be made to manage the course as stated. However, adjustments may be necessary in these unprecedented times. If so, students will be advised, and alterations announced on Quercus prior to implementation.

January 11	Introduction to Clinical Psychopharmacology
January 18	Techniques in Neuropharmacology
January 25	Neurochemistry and Neurotransmitters
February 1	Catecholamine and Serotonin Pathways
February 8	Acetylcholine, GABA, and Glutamate Pathways Commentary Assignment Due
February 15	Spring break (No Class)
February 22	The Biopsychosocial Model of Addiction
March 1	Midterm Assessment
March 8	Alcohol Abuse and Dependence: Neurobiology and Clinical Implications
March 15	Opioid Use Disorders
March 22	Molecular and Cellular Biology of Stimulant Addictions
March 29	Caffeine, Nicotine, and Cannabinoids Case Study Assignment Due
April 5	Neuropharmacology of Mental Illnesses and their Treatments
April 13-23	Final Assessment

Course Webpage/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, and posting grades. 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 basis.

To access the course website, go to the U of T Quercus log-in page at <https://q.utoronto.ca>. 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.

Course Policies

Psychology Department Missed Term Work Policy, WINTER 2021

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

Notes:

- 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: <http://www.utoronto.ca/registrar/missing-examination>
- 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.utoronto.ca/registrar/term-work>

Accommodations for Illness or Emergency:

For missed work due to ILLNESS OR EMERGENCY, please complete the following **two-step** process:

1. Complete the **Request for Missed Term Work Accommodations Form** (<http://uoft.me/PSY-MTW>) and email it to Keely Hicks at keely.hicks@utoronto.ca,
and

2. **Declare your absence** on ACORN (Profile & Settings > Absence Declaration)

Deadline: You must complete the above steps **within 3 business days** of the missed work.

Note: For this semester, we do not require any additional supporting documentation (ex. medical notes) to support your missed term work accommodation request.

Accommodations for Academic Conflicts:

For missed term work due to an ACADEMIC CONFLICT (i.e. two quizzes or tests scheduled at the same time), please complete the following process:

1. Complete the **Request for Missed Term Work Accommodations Form** (<http://uoft.me/PSY-MTW>), choosing "Other" as your reason for missed work and explaining the conflict in the space provided.
2. Take screenshots of your course homepages that demonstrate the conflict.
3. Email the form and screenshots to Keely Hicks (keely.hicks@utoronto.ca).

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **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.

Note: Multiple assignments due on the same day are not considered conflicts. Accommodations may only be possible in the case of quizzes and tests that are both scheduled during the same discrete period. Back-to-back tests/quizzes are not considered conflicts.

Note: Students are responsible for keeping their course timetables conflict-free. Students who choose to register in two synchronous courses with overlapping lecture/tutorial/lab schedules may not necessarily be accommodated.

Accommodations for Religious Conflicts:

For missed term work due to a RELIGIOUS CONFLICT, please complete the following process:

1. Complete the **Request for Missed Term Work Accommodations Form** (<http://uoft.me/PSY-MTW>), choosing “Other” as your reason for missed work and noting “Religious conflict” in the space provided.
2. Email the form to Keely Hicks (keely.hicks@utoronto.ca).

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **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.

Accommodations for Time Zone Conflicts:

If you are physically in a different time zone and a quiz or midterm is scheduled outside of 7:00am to midnight in your local time, please complete the following process:

1. Complete the **Time Zone Conflict Form** (<https://uoft.me/PSY-TimeZone>), and
2. Email the form to Keely Hicks (keely.hicks@utoronto.ca)

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **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.

Accommodations for Students Registered with AccessAbility Services: For missed **TERM TESTS** due to ACCESSABILITY REASONS:

- **Contact 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 3 days):
 1. Complete the **Request for Missed Term Work Accommodations Form** (<http://uoft.me/PSY-MTW>).
 2. Email the form and your **Accommodation Letter** to Keely Hicks (keely.hicks@utoronto.ca).
- 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):
 1. **Contact your AccessAbility consultant** and have them email Keely Hicks (keely.hicks@utoronto.ca) detailing the accommodations required. **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 and declare your extended absence on ACORN.

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**.

Questions?

If you have any questions about this Missed Term Work policy, please contact Keely Hicks (keely.hicks@utoronto.ca) **well before** the date of the test / assignment deadline to describe your circumstances and inquire about procedures.

Penalties for Lateness

A penalty of 10% per calendar day, up to and including the last day of classes, will be applied for late assignments. After the last day of classes, the penalty of 10% per calendar day will be applied by the Undergraduate Counselor on behalf of the Department. No penalty will be assigned if request for special consideration, described above, was successful. Any term work that will be handed in **after** the final assessment period is subject to a petition for extension of term work. This petition should be filed with the student's College Registrar's Office.

Turnitin.com

Normally, students will be required to submit their course essays to Turnitin.com for 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 for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site.

Academic Resources

Students with Disabilities or Accommodation Requirements

Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year by visiting <http://www.studentlife.utoronto.ca/as/new-registration>. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your

accommodation needs. AS will assess your situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

Writing

As a student here at the University of Toronto, you are expected to have strong writing skills. The university provides its students with a number of resources to help them achieve this. For more information on campus writing centers and writing courses, please visit <http://www.writing.utoronto.ca/>.

Academic Integrity

All students, faculty and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty when writing assignments, collaborating with fellow students, and writing tests and assessments. Ensure that the work you submit for grading represents your own honest efforts.

Plagiarism - representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program - is a serious offence that can result in sanctions. Speak to me or your TA for advice on anything that you find unclear.

To learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at <http://www.writing.utoronto.ca>. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see

<https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity> and <http://academicintegrity.utoronto.ca>

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

www.utoronto.ca/academicintegrity/resourcesforstudents.html

Mental Health and Well-being

As a student, you may experience challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation, financial concerns, family worries and so forth. In fact, these are the types of issues that we will be exploring in this course, which also may be “triggering” for some individuals. These factors may affect your academic performance and/or reduce your ability to participate fully in daily activities. Everyone feels stressed now and then – it is a normal part of life – especially university life! Some days are better than others, and there is no wrong time to reach out. There are resources for every situation and every level of stress.

There are many helpful resources available through your College Registrar or through Student Life (<http://studentlife.utoronto.ca> and <http://www.studentlife.utoronto.ca/feeling-distressed>). An important part of the University experience is learning how and when to ask for help. Please take the time to inform yourself of available resources, as there are many and the University wants to see you succeed!