

Psychology (PSYC) 450

Drugs and Behaviour (Revision 4)

Status: Replaced with new revision, see the [course listing](#) for the current revision ✖

Delivery mode: **Individualized study online** with **eText**. Delivered via Brightspace.

Credits: 3

Areas of study: Arts or Social Science

Prerequisites: Courses in introductory psychology and biological psychology are strongly recommended.

Precluded: None

Challenge: PSYC 450 is not available for challenge.

Faculty: **Faculty of Humanities and Social Sciences**

Overview


PSYC 450 introduces the field of behavioural pharmacology, with an emphasis on the characteristics of psychoactive drugs, their mechanisms of action in the nervous system, and their effects on the brain and on behaviour. This course will help you to understand the current research into the pharmacology of drugs, from recreational uses to clinical applications, including insights into their abuse potential.

Note that this course is an intensive neuroscience-based course, and it is recommended that students have a basic understanding of neuroanatomy, neurophysiology, and neurotransmission. **PSYC 402 - Biological Psychology**, or equivalent, is strongly suggested before taking PSYC 450.

Outline

- Unit 1: Principles of Pharmacology
- Unit 2: Structure and Function of the Nervous System
- Unit 3: Chemical Signaling by Neurotransmitters and Hormones
- Unit 4: Methods of Research in Psychopharmacology
- Unit 5: Catecholamines
- Unit 6: Serotonin
- Unit 7: Acetylcholine
- Unit 8: Glutamate and GABA
- Unit 9: Drug Abuse and Addiction
- Unit 10: Alcohol
- Unit 11: The Opioids
- Unit 12: Psychomotor Stimulants: Cocaine, Amphetamine, and Related Drugs
- Unit 13: Nicotine and Caffeine
- Unit 14: Marijuana and the Cannabinoids
- Unit 15: Hallucinogens, PCP, and Ketamine
- Unit 16: Inhalants, GHB, and Anabolic-Androgenic Steroids
- Unit 17: Disorders of Anxiety and Impulsivity and the Drugs Used to Treat These Disorders
- Unit 18: Affective Disorders: Antidepressants and Mood Stabilizers
- Unit 19: Schizophrenia: Antipsychotic Drugs
- Unit 20: Neurodegenerative Diseases

Evaluation

To **receive credit** for the course, you must complete all of these evaluation assignments. You must receive a grade of 50 percent or better on the final exam and a composite course grade of at least **D (50 percent)** . The weighting of assignments is as follows:

Activity	Weight
Five Quizzes (5% each)	25%
Term Paper	35%
Final Exam	40%
Total	100%

The **final examination** for this course must be requested in advance and written under the supervision of an AU-approved exam invigilator. Invigilators include either ProctorU or an approved in-person invigilation centre that can accommodate online exams. Students are responsible for payment of any invigilation fees. Information on exam request deadlines, invigilators, and other exam-related questions, can be found at the **Exams and grades** section of the Calendar.

To learn more about assignments and examinations, please refer to Athabasca University's **online Calendar**.

Materials

Meyer, J. S., & Quenzer, L. F., with Yates, J. R. (2019). *Psychopharmacology: Drugs, the brain, and behavior* (3rd ed.). Oxford University Press. (eText)

eText

Registration in this course includes an electronic textbook. For more information on **electronic textbooks**, please refer to our **eText Initiative site**.

Other Materials

All other course materials are available online, including a study guide covering the entire course.

Important links

- [Academic advising](#)
- [Program planning](#)
- [Request assistance](#)
- [Support services](#)

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery methods may vary from their individualized study counterparts.

Opened in Revision 4, April 20, 2023

Updated December 19, 2024

View [previous revision](#) 
