



Psychology (PSYC) 450

Drugs and Behaviour (Revision 3)

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

Delivery mode: **Individualized study online** [↗](#) or **Grouped study** [↗](#)

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 taken online with an AU-approved exam invigilator at an approved invigilation centre. It is your responsibility to ensure your chosen invigilation centre can accommodate online exams. For a list of invigilators who can accommodate online exams, visit the **Exam Invigilation Network** [↗](#).

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.  (Print)

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.

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View **previous revision** [↗](#)
