

DRUGS AND THE BRAIN
PSYC62
(Fri 10 am-12 pm; Rm. SY 110)

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Course description

Psychopharmacology is the study of the effects of drugs on behaviour, cognition, and emotion. There are many different classes of drugs that act within the central nervous system to alter behaviour, cognition and emotion. Some have been designed for the treatment of mental disorders such as schizophrenia and depression. Other drugs are known primarily for their social or recreational abuse potential. This course will provide an introduction to basic principles of psychopharmacology, with a specific focus on drugs of abuse.

A range of topics pertinent to the study of psychopharmacology will be covered, including behavioural pharmacology and pharmacokinetics, neurobiological mechanisms of drug action, tolerance and dependence, and classification of psychotropic drugs. In addition, several of the major classes of drugs of abuse will be studied and recent research on the behavioural and neurobiological effects of these drugs will be examined.

Textbook

David M. Grilly (2006) *Drugs and Human Behavior, Fifth Edition*. Boston, MA: Allyn & Bacon.

Course Website

Course-related information including lecture notes and assigned readings will be provided on the intranet.

Course Components and Evaluation

- Evaluation will be based on a midterm (45% of final grade) and final (55% of final grade) exam.
- The exams will consist of both multiple choice and short answer questions. Students are responsible for all lecture and textbook material (unless otherwise specified).
- The final exam will be cumulative.

SCHEDULE OF LECTURES

DATE	TOPICS	READINGS
Jan 14	<ul style="list-style-type: none"> • Introduction to course • Principles of Pharmacology 	<ul style="list-style-type: none"> • Ch 2
Jan 21	<ul style="list-style-type: none"> • Principles of Pharmacology (cont.) • Pharmacokinetics 	<ul style="list-style-type: none"> • Ch 2 • Ch3
Jan 28	<ul style="list-style-type: none"> • Neuronal transmission and conduction • Neuroactive ligands 	<ul style="list-style-type: none"> • Ch 4 • Ch 5
Feb 4	<ul style="list-style-type: none"> • Tolerance and dependence 	<ul style="list-style-type: none"> • Ch 6
Feb 11	<ul style="list-style-type: none"> • Drug classification 	<ul style="list-style-type: none"> • Ch 7
Feb18	MIDTERM EXAM	<ul style="list-style-type: none"> • Ch 2-7
Feb 25	READING WEEK	
Mar 4	<ul style="list-style-type: none"> • DVD: “Addiction” 	
Mar 11	<ul style="list-style-type: none"> • Sedative hypnotics and anxiolytics 	<ul style="list-style-type: none"> • Ch 8
Mar 18	<ul style="list-style-type: none"> • Psychotomimetics, psychedelics, and hallucinogens 	<ul style="list-style-type: none"> • Ch 11
Mar 25	<ul style="list-style-type: none"> • Psychostimulants 	<ul style="list-style-type: none"> • Ch 9
Apr 1	<ul style="list-style-type: none"> • Opiates 	<ul style="list-style-type: none"> • Ch 10
Apr 8	<ul style="list-style-type: none"> • Relapse and reinstatement • Withdrawal and craving 	Some suggested readings will be given prior to lecture