

**DRUGS AND THE BRAIN**  
**PSYC62**  
**(Fri 10 am-12 pm; Rm. AA 112)**

Instructor: Prof Suzanne Erb  
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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 and John D. Salamone (2012) *Drugs, Brain, and Behavior, Sixth 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 cover material from after the mid-term.

## SCHEDULE OF LECTURES

<b>DATE</b>	<b>TOPICS</b>	<b>READINGS</b>
Jan 13	<ul style="list-style-type: none"> <li>• Introduction to course</li> <li>• Psychopharmacology in Perspective</li> <li>• Drug Classification</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 1-2</li> </ul>
Jan 20	<ul style="list-style-type: none"> <li>• Principles of Pharmacology</li> </ul>	<ul style="list-style-type: none"> <li>• Ch3</li> </ul>
Jan 27	<ul style="list-style-type: none"> <li>• Neuronal transmission and conduction</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 4 and 5</li> </ul>
Feb 3	<ul style="list-style-type: none"> <li>• Tolerance, sensitization, dependence and addiction</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 6</li> </ul>
Feb 10	<ul style="list-style-type: none"> <li>• DVD: “Addiction”</li> </ul>	
Feb17	<b>MIDTERM EXAM</b>	<ul style="list-style-type: none"> <li>• Ch 1-6</li> </ul>
Feb 24	<b>READING WEEK</b>	
Mar 2	<ul style="list-style-type: none"> <li>• Psychomotor stimulants</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 7</li> </ul>
Mar 9	<ul style="list-style-type: none"> <li>• Sedative hypnotics and anxiolytics</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 10</li> </ul>
Mar 16	<ul style="list-style-type: none"> <li>• Psychomotor stimulants in the treatment of cognitive dysfunction (ADHD)</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 11</li> </ul>
Mar 23	<ul style="list-style-type: none"> <li>• Opiates</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 12</li> </ul>
Mar 30	<ul style="list-style-type: none"> <li>• Dissociative anesthetics, psychedelics, and hallucinogens</li> </ul>	<ul style="list-style-type: none"> <li>• Ch 13</li> </ul>
Apr 9	<ul style="list-style-type: none"> <li>• Wrap-up/Review</li> </ul>	