

**Program:** Pharmacology

**Course Name:** Pharmacology of Drugs of Abuse

**Course Number:** 540

**Credits:** 3

**Course Director:** Alan Cowan, Ph.D. Room 313 MRB Tel. 2-4110 email.  
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Students may communicate by email or phone at any time.

**Prerequisites:** Biology and Biochemistry

**Disability Statement:** Any student who has a need for accommodation based on a disability should contact the Course Director as soon as possible.

**Times:** Spring semester, every other year. Twice a week for 2 hours.

**Location:** Room 311 MRB.

**Description:** The goal of the course is to describe the pharmacology of drugs of abuse.

**Syllabus:**

1. Introduction
2. Historical aspects of drug abuse
3. Opioids: structure-activity relationships
4. Opioids: structure-activity relationships
5. Cellular responses to acute treatment with drugs of abuse
6. Opioids: general pharmacology
7. Assessment of physical dependence: animals
8. Cellular responses to chronic treatment with drugs of abuse
9. Assessment of physical dependence: humans
10. Nicotine
11. Medical treatment for heroin addiction
12. Cocaine
13. Marijuana
14. Benzodiazepines and sedatives
15. LSD and PCP
16. Alcohol
17. Caffeine
18. Club drugs
19. NIDA/CPDD
20. Immunopharmacology of drugs of abuse
21. Short talks (by students)
22. Review of course
23. Short talks (by students)
- 24. EXAM**