Required Texts


(3) Articles will be available on course website.

Grading
Undergraduates: Exam 1: 35%, Exam 2: 45%, Reaction papers 20%
Graduates: Exam 1: 30%, Exam 2: 40%, Reaction papers: 30%

Reaction papers
Non-graduate students: Each student is responsible for writing 4 reaction papers, two prior to the 1st midterm (March 11) and two for the period from the midterm to the final (May 13). The reaction papers should be 1 to 2 double spaced pages, typed in 12 point Times (or similar) font. The assignments are based on class readings and will usually, if not always, offer a choice of topics. For example, a possible topic for the readings on smoking is: “On the basis of this week’s readings, explain why people smoke cigarettes.” The reaction papers are due at the start of class and are graded on a three-tiered scale: 0, 1, 2. Students who receive a “2” or better will obtain full credit (20% of all possible course points). More information about the reaction papers will be presented in class. Note that reaction papers have to be on “this week’s” question or topic. Do not write a reaction paper on a previous week’s question or topic.

Graduate students: You are responsible for writing 6 reaction papers, three prior to the midterm, and three more prior to the final. The reaction papers should be between 2 and 3 pages long, otherwise as above.

Optional term paper assignment for graduate students: You can substitute a term paper for the last three reaction papers. Your paper topic must be approved before hand. Turn in a two page proposal that includes title, the question you want to answer, and a list of preliminary key references. Term paper should include an abstract and a thesis statement in the first paragraph. Length is 10 to 12 pages. Use APA style. See below for due dates.

Key dates
March 11 Midterm exam
April 8 Graduate student optional term paper topic proposal due
April 29 Last day to turn in optional graduate student term paper draft for feedback
May 6 Graduate student optional term paper due
May 13 Final exam

Schedule of Lectures:
January 28, 2009 – Lecture 1
Introduction: Defining addiction, an overview of the topic, and course mechanics. “Addiction” identifies a self-destructive pattern of drug use. The popular understanding is that addiction is compulsive drug use (meaning involuntary). However, self-destructive behavior is not
necessarily compulsive. Whether addictive drug use is voluntary or involuntary is an empirical question. To answer it properly requires an objective definition of compulsion and a sufficiently rich account of the determinants of drug use. This course offers an objective definition of voluntary behavior, compulsion and an account of the factors correlated with drug use.


February 4 – Lecture 2
Neurons, drugs, psychopharmacology: How drugs reach their site of action; receptor dynamics; psychopharmacology; brain plasticity.

McKim, W. A.: Chapters 1 and 4 (Methods and Pharmacology)


*Recommended: Glance through to get a sense of brain plasticity.

February 11 – Lecture 3
Opiate Use, part 1: History, psychopharmacology, tolerance, and withdrawal.

McKim, W. A.: Chapters 3 & 12.


February 18 – Lecture 4


February 25 – Lecture 5
Subjective aspects of drug use: Craving, intoxication.


March 4 – Lecture 6
Smoking and quitting smoking
History and epidemiology of tobacco smoking. Why do people smoke? Quitting cigarettes.

McKim, W. A.: Chapter 9, Tobacco.


March 11 – Lecture 7 – MID-TERM EXAMINATION

March 18 – Spring break – No class

March 25 – Lecture 8
Similarities and differences between OCD and addiction. An introduction to the nature of voluntary behavior.

McKim, W. A.: Chapter 5.


Heyman, Chapter 5

April 1 – Lecture 9
Self-destructive behavior as a logical consequence of the rules of choice.
Selected topics: The ambiguous nature of making the “best choice.” How the structure of motivation and decision making yield ambivalence, excessive preference, and regret. A conceptual framework for integrating the biological, sociological, and psychological factors that promote addiction.
Heyman, Chapters 6 & 7.

Mazur: Selections on basic choice research.

April 8 – Lecture 10
Introduction to alcohol and alcoholism and implications of genetic influences on behavior. Selected topics: The history of alcohol use, alcohol pharmacology and psychology, genetic influences on drinking. Does a genetic influence in alcoholism imply that it is a disease?


April 15 – Lecture 11
Alcoholism, recovery and Alcoholics Anonymous.


April 22 – Lecture 12
Cocaine addiction, the nature of reward, and the pharmacology of reward. Are there residual drug-induced cognitive changes?
Selected Topics: The new prototypical addictive drug, residual brain changes, biology of reward. Why are just a few of the many available rewarding commodities and activities “addictive?” Incentive-based recovery programs.

McKim, W. A.: Chapter 11, Psychomotor stimulants.


*Recommended: These papers help reveal the nature of reinforcement.

April 29 – Lecture 13
Marijuana

McKim, W. A.: Chapter 15, Cannabis.


Graduate students: April 29 is the last day to turn in draft version of optional term paper for feedback.

May 6 – Lecture 14


Graduate student optional term paper due.

May 13 – FINAL EXAMINATION