This course is designed to provide non-medical professionals a working knowledge of psychoactive drugs; their classification, pharmacokinetics (how drugs are handled in the body), pharmacodynamics (how drug act in the body), as well as the physical and behavioral consequences of drug use and abuse. The course utilizes lecture, video training, large and small group discussion, reading and research assignments, and some in-class exercises.

**Requisites** - None, recommended preparation: Eligibility for ENGL 100 and READ 100

**Core Cabrillo Competencies:**
- Communication
- Critical Thinking and Information Competency
- Global Awareness
- Personal Responsibility and Professional Development

**Learning Outcomes**
1. To identify the basic physiology and functioning of the human body with an emphasis on the central nervous system.
2. To classify psychoactive drugs by their action in the Central Nervous System.
3. To understand the basics of drug action at a neurological level and interpret how the pharmacodynamics of a drug translate into specific behaviors, behavioral patterns, and health consequences for the body.
4. To summarize the toxic and withdrawal effects of various psychoactive drugs with an ability to assess general physical and behavioral risk and identify effective medical and behavioral interventions strategies.
5. To explain how the dynamics of drug action in the body impact drug use patterns and the development of drug dependency.

**Objectives**
1. Locate and describe the major body organ systems with a special emphasis on the Central Nervous System; explain how the organ systems functionally relate under normal conditions and in the in the pharmacokinetics of drugs;
2. Examine and develop an understanding of the basic principles of pharmacology and biopharmaceutics;
3. Study and discuss the effects of alcohol and other mood altering drugs on the brain and behavior; this study will include a detailed study of the states of drug toxicity and withdrawal;
4. Develop a conversant understanding of chemical dependency as a biological process;
5. Understand the principles and applications of pharmacological and physiological treatment strategies.

Content
1. Fundamental Organization of the Human Body
2. Study of brain structure and function—the neuron, synaptic transmission and neurotransmitters
3. Basic pharmacokinetics and pharmacodynamics
4. Drugs that depress brain function: Sedative hypnotic drugs
5. Drugs that stimulate brain function: Psychostimulants
6. Drugs that relieve pain: Opioid and nonopioid analgesics
7. Drugs that possess hallucinogenic or psychedelic properties
8. Drugs used to treat psychological disorders

Evaluation- Requirements for passing the course include:
1. Attendance and classroom discussion participation (30%)- You are expected to attend all regularly scheduled class meetings and participate in classroom discussions and activities. Each class is valued at 20 points; and includes equally value for attendance and active participation. Students who attend but do not participate in classroom discussions or learning activities will receive 10 points (per class) for their attendance, but no additional points for participation. The total of points earned as a percentage of points possible will determine a student’s attendance and participation grade. Absences will greatly reduce your ability to pass this course. Students leaving class before class is dismissed must have instructor permission or 50% attendance credit for that class will be deducted. See the instructor if you have more than 2 absences.
2. Complete 4 take-home essay questionnaires (5 points each)--these will be handed out by the instructor at intervals during the semester.
3. Mid-term (25%) and Final Exam (25%)- These are multiple choice, true/false, and short essay exams constructed from the reading and classroom discussion materials.

Grading- Letter Grade or CR/NC. You can take this course for credit or on a pass/fail basis whereby upon successful completion of the course you will receive the appropriate number of credits with no grade attached. Grading will be as follows:

90-100% - A
80-89%  - B
70-79%  - C
60-69%  - D
0-59%   - F

Week 1- 2/8, Introduction to Course
- Syllabus and text review
- Functional Organization of the Human Body (handout)--Film Assignment- Take Brain and Neurotransmitter handout and read for future classes

Week 2- 2/15- Holiday

Week 3- 2/22- Understanding the Brain and Nervous System
- Chapter 2 from Text (pages 41-54): Overview of the Nervous System
- Discuss handouts (week 1)
- Film: The Brain

Week 4- 3/1- Understanding the Brain and Nervous System (Cont.)
- Chapter 3 and 4 from Text (pages 57-96)
- Discuss handouts (week 1)
- In class exercises--the brain and how neurons work

Week 5- 3/8- The Basics of Pharmacology
- Chapters 1 and 5 from Text (pages 11-33 and 103-117);
- Pharmacokinetics, how drugs are handled by the body;
- Pharmacodynamics, how drugs act in the body
- Film, Drug Abuse and the Brain

Week 6- 3/15- Alcohol and Anti-Anxiety Drugs
- Chapter 6 from Text (pages 121-145)

Week 7- 3/22- Mid-Term Exam

Week 8- 3/29- Spring Break

Week 9- 4/5- Psychostimulants
- Chapter 7 from Text (pages 149-165)
- Film: Meth

Week 10- 4/12- Drugs that Relieve Pain
- Chapter 8 from Text (pages 169-187)
- Film- Methadone
Week 11- 4/19, Marijuana and the Hallucinogenic Drugs
   • Chapter 9 Text (pages 191-210)
   • Chapter 10 (pages 215-223)

Week 12- 4/26, Inhalants and Other Drugs of Abuse
   • Chapter 11 Text (pages 229-231)
   • Chapter 12 Text (pages 237-241)
   • Handout on Designer Drugs

Week 13- 5/3, Medications for Mental Health
   • Chapter 14 Text (pages 265-286)
   • Films--Medications
      -ADD/ADHD
      -Bipolar
      -Major Depression
      -Psychotic Disorders
      -Anxiety Disorders

Week 14- 5/10, Drug Testing. Also the role of nutrition in Addictions Treatment
   • Chapert 13 Text (pages 247-257)
   • Handouts and guest lecturer

Week 15- 5/17, Preparation for Final Exam

Week 16- Final Exam (Time and Date TBA)