



Scappoose High School Science

2018 Drugs and the Brain Syllabus

Ms. Kelsey Quinn

B.S., Biology, Minors: Chemistry, Spanish; Oregon State University.

M.S., Science Education; Oregon State University

Email: kquinn@scappoose.k12.or.us

Phone: 971-200-8005, ext 5123

Website: www.kquinnscience.weebly.com;

Google Classroom code: **b7wu8z**

Office Hours: 8:30-9:30 AM every day, after school by appt.

Location: SHS C-3

Period(s) Taught: **1**

Course Description:

This class will be an introduction to pharmacology (study of drugs) and their mechanisms (how they work) on the brain. Drugs known as psychoactive (drugs that alter the normal functioning of the central nervous system – CNS) will form the basis for this class. The structure of the class will utilize basic concepts with specific examples so that it is not loaded with boring abstract theories.

Student Learning Outcomes

- Summarize the five historical themes of drug use across all cultures
- List and explain the routes of administration and the effect on the CNS
- Distinguish between Uppers, Downers, and All arounders and the classifications within these three groups

Reference Text: Uppers, Downers, All Arounders; Physical and Mental Effects of Psychoactive Drugs, 7th Edition, Inaba, D., and Cohen, W., CNS Publications, Inc., 2014

Pharmacology DeMystified, Kamienski, M., and Keogh, J., McGraw-Hill, 2006

Prerequisites: None.

Assignments, Projects, and Quizzes:

Assignments and class discussions are designed to increase self-awareness and develop and understand of and application of the impact of drugs in our society. In addition to informative lectures, there will be class discussions and related projects/activities/labs. All work should be done in a timely manner. Late assignments will be docked 25% within the first two days of being late and will not be accepted after 3 days late. Most of the assignment grade will be for completion and participation on the assignment, up to 30% of the assignment grade will be for accuracy. Students are expected to keep an organized binder or folder of all class work for reference, but this will not be graded as a separate grade.

There will be six (6) tests/quizzes, given after the completion of a major topic of a chapter.

Grading:

Your final grade is based on your percentage of the total points possible.

Final Grade	Points Required
A	90% +
B	80%-89%
C	70%-79%
D	60%-69%

General Course Outline

This outline is intended only as an informational guideline representing what I hope to cover in this class. It is subject to change based on time.

- I. What is pharmacology?
 - a. Pharmacology
 - b. History of psychoactive drugs
 - c. Classification of psychoactive drugs
- II. Heredity, Environment, and Psychoactive Drugs (Chapter 2)
 - a. Routes of Administration
 - b. The Nervous System
 - c. Basic Neurophysiology
 - d. Neurochemistry of drug effects
- III. Uppers (Chapter 3)
 - a. Classification and effects
 - b. Cocaine
 - c. Amphetamines
 - d. Caffeine
 - e. Nicotine
- IV. Downers: Opiates/Opioids and sedative-Hypnotics (Chapter 4 & 5)
 - a. General Classifications
 - b. Opiates/Opioids
 - i. Classification
 - ii. History of use
 - iii. Effects
 - iv. Side-effects with other opiates/opioids
 - v. Pain control
 - c. Sedative/Hypnotics
 - i. Classification
 - ii. History of use
 - iii. Effects
 - iv. Benzodiazepines
 - v. Barbiturates
 - vi. Other sedative-hypnotics
 - vii. Prescriptions and pharmaceuticals
 - d. Alcohol
 - i. Beverages
 - ii. Absorption and metabolism
 - iii. Effects
 - iv. Addiction
- V. All Arounders (Chapter 6)
 - a. Classification and general effects
 - b. Psychadelics
 - i. LSD, psilocybin, and other indoles
 - c. Anticholinergic psychedelics
 - i. Peyote, MDMA, and other anticholinergics
 - d. Ketamine PCP and other psychedelics
 - e. Marijuana and other cannabinoids
- VI. "Other" drugs, other addictions (Chapter 7)
 - a. Inhalants
 - b. Sports Drugs
 - i. Steroids
 - c. Miscellaneous drugs
 - i. Herbs and Smart Drugs

Affirmation and Acceptance of Responsibility – Ms. Quinn’s Drugs and the Brain Class

Please tear off this page and give to Ms. Quinn by _____

My child and I have read the class policies and understand the expectations in class. Class Period_____

Student Name (please print):_____

Student Signature: _____ Date:_____

Parent/Guardian Name (please print):_____

Parent/Guardian Signature:_____ Date:_____