



NEUROSCIENCE

Undergraduate Interdepartmental Program



BRAIN
RESEARCH
INSTITUTE
UCLA

DRUG ABUSE AND SOCIETY: CONVEYING CONCEPTS TO HIGH SCHOOL STUDENTS

NEUROSCIENCE 192C (4 UNITS)

Course Instructors:

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Course Description:

This course will prepare students to give an accurate, knowledgeable and age-appropriate lecture in the area of drug abuse to students at local high schools. The course is designed to: a) increase course participants' knowledge about drug abuse issues (including policy, biology and statistics) in our society, b) give students experience in preparing a presentation that would be suitable in a classroom setting, and c) provide UCLA students the opportunity and training to effectively translate their learned information of abused drugs to an at-risk population. The course is designed as a follow-up from Neuroscience C117/C277 (Drugs of Abuse: From Neurobiology to Policy and Education) and will contain an initial didactic/workshop component covering statistics, policy and the co-morbidity of drug abuse issues with psychiatric disorders.

Prerequisites:

Course prerequisites include holding the status of Undergraduate Senior and having previously taken Neuroscience C177/C277. Graduate students at UCLA in an area that would enable them to be cognizant of drug abuse neurobiology and/or policy can also enroll.

Class Time and Location:

Mondays, 12:00-3:00 PM

Additional Class Times TBD (Weeks 8, 9, 10)

Gonda 3303

Course Format, Assignments and Grading:

Class meeting will feel more like workshops than lectures. The idea is to create an open environment where students and instructors can freely discuss concepts, clarify misconceptions and exchange ideas. Different resources will be made available prior to and during the class meetings to help foster these discussions. As such, students are expected to review the material before coming to class and to engage in scholarly discourse in every class as they work on their drug presentations.

Grading will be based on the drug presentations and on preparation of materials for the school visits. Students will be asked to modify preexisting presentations to effectively target a high school audience. This will serve as the midterm assessment. Students will also be asked to prepare a detailed proposal for an informative and engaging station about their drug. Other graded assignments include preparation of survey questions and informational pamphlets on the assigned drug categories. Please see instructions below for details on how to put together the different assignments.

At the end of the course the students will be asked to give us a copy of all their work to be compiled and ultimately used by local schools as a pedagogical tool. Due credit will always be given to the students unless he/she prefers to remain anonymous.

This course will be letter graded on a straight scale: 98-100% → A+, 93-97% → A, 90-92% → A-, 87-89% → B+, 83-86% → B, 80-82% → B-, 77-79% → C+, 73-76% → C, 70-72 → C-, 55-69 → D, 0-54% → F; with a 70% (C) considered a passing grade. Please keep in mind that there are no curves in this course so each student earns their grade based on the scale above regardless of what the class grade distribution looks like. The grading structure is as follows:

Weekly participation →	5%	In-class targeted presentation →	10%
Survey questionnaires →	5%	Drug station proposal →	10%
Rough draft of pamphlet →	15%	Drug station execution →	5%
Final draft of pamphlet →	5%	Final presentation →	25%
Targeted presentations →	20%		

Class Schedule:

Week 1	Introduction to course, group selection, assignment of categories for presentations and pamphlets. General discussion on presentations to K-12
Week 2	Bring potential survey questions and rough draft of pamphlet to class for discussion. Discuss presentations, assign targeted presentations.
Week 3	Rough draft of pamphlets returned Brainstorm station ideas and assign station proposals
Week 4	Final draft of pamphlets due, targeted presentations due, Begin in-class targeted presentations
Week 5	Continue in-class targeted presentations Station proposals due
Week 6	Station creation and critique. Start dress rehearsal for high school presentations
Week 7	Complete dress rehearsal for high school presentations
Week 8	Monday high school visit + one other visit TBD
Week 9	Monday high school visit + one other visit TBD
Week 10	Pizza and debriefing the school visits TBD (Monday is a holiday!)

Instructions for Drug Presentations

Students will be assigned to groups and assigned one of the following drug categories. Each group will prepare an informative presentation on their drug category including mechanism, examples and social issues. Additionally, each group will prepare a creative and engaging

“station” to teach about their assigned drug. Each group presentation should be no more than 15 minutes long. Each group member is responsible for knowing all the material in the presentation, and students will be randomly assigned to present specific sections of the presentation on the day of the high school visit. During the school visits, one group will give a presentation on their assigned drug category, and the other groups will set up their stations.

Drug categories:

1. Prescription drugs (opioids and psychostimulants)
2. Legal drugs (alcohol and nicotine)
3. Cannabinoids (marijuana and spice)
4. Party drugs (date-rape drugs, rave drugs)

Targeted Presentations

As an exercise in preparing effective communication tools for a high school audience, students will be asked to modify preexisting presentations to make them “targeted”. Each student will be responsible for creating two “targeted” presentations, and will give one of these presentations in class to practice appropriate presentation style. Drugs covered in these presentations will be those that are somewhat less relevant to the general high school audience yet still deserving of coverage. Targeted presentations will be made available on the website as an additional resource for students.

Drugs:

- | | |
|--------------------|-----------------------|
| 1. Cocaine | 7. Psilocybin |
| 2. Methamphetamine | 8. PCP |
| 3. Benzodiazepines | 9. Ketamine |
| 4. Heroin | 10. Volatile solvents |
| 5. LSD | 11. Nitrous oxide |
| 6. Mescaline | |

Instructions for Written Assignments

Presentation surveys

To help us assess the effect of our school visits, we will ask you to actively participate in creating your own pre- and post-course surveys to generate assessment data. The pre-course survey should let us know what the students know about drugs and the brain before we visit them while the post-course survey should let us know how much they have learned from our visit. After you create your own surveys, we will discuss them in class and collectively decide

which ones are the best questions, to be included in the final surveys used in the classroom visits.

Drug information pamphlets

As part of the school visits, we will provide the students with informational pamphlets that they can use as a reference and which tells them how and where to find more information on the particular drugs you focus on individually. The pamphlet should be brief (no more than one page, front and back, for each drug) and should summarize your drug presentations. As such, it should include general information on your drug class as well as specific information on your example drugs. Be sure to also include links to vetted on-line resources that students can use to find additional information. Feel free to include images, pictures, graphs and any other visual aids that will make your pamphlet more user friendly. Pamphlets should be formatted into three columns so that the page can be folded appropriately. Examples of previous pamphlets will be shown in class. Rough drafts will be graded for content and age-appropriateness, and students will be asked to address any comments before printing the pamphlets.

Station Proposal

The station proposal should include all the relevant information that you will need to both create the station and to prepare yourself to answer questions from the high school students. The station should convey all the information that is in the presentation, and should be creative. This is an individual assignment, but creation and execution of the stations will be a group effort.