

BISP 170, Spring Quarter, 2018

Bioscholars Seminar: "Drugs and Addiction" SYLLABUS

Instructor: Dr. Kathleen French (kfrench@ucsd.edu)

Time: Mondays 3:00--5:00 PM in York Hall 3010

General course description: *2 units, letter grade (or P/NP).* Each year, this student-organized seminar course considers several aspects of a current topic in biology. This year we'll consider "Drugs and Addiction." What is addiction and what happens in the nervous system in the condition we call addiction? What are some current (or ancient or future) therapeutic approaches that may become widely used? We'll also explore the process by which results obtained in the basic sciences are translated into safe and effective clinical practice, including the constraints that must be satisfied before any procedure, drug, or device can legally and ethically be used to treat patients. Speakers will also discuss their own research.

Contacting your instructor: Email: kfrench@ucsd.edu Office: Pacific Hall 3123B

Week	Date	Speaker	Topic
1	April 2	Dr. Kathleen French (Biological Sciences/Neurobiology)	An introduction to BISP 170; How to successfully read papers from the primary research literature
2	April 9	Dr. Christina Gremel (Psychology)	Drug dependence disrupts top-down control over action selection
3	April 16	Dr. Jeanette Bowles (UCSD SOM, Medicine)	Epidemiology of drug addiction
4	April 23	Dr. Carla Marienfeld (UCSD SOM, Psychiatry)	Medication treatment for opioid use disorder
5	April 30	Dr. Jaime Pineda (Cognitive Science)	Stimulants: From basic science to addiction and treatment
6	May 7	Dr. Maria Infante (UCSD SOM, Psychiatry)	Substance use and the adolescent brain
7	May 14	Dr. Arnold Gass (UCSD SOM, Psychiatry and VA Hospital)	Ethical considerations raised by the "opioid epidemic and the treatment of drug-addicted and opioid-dependent persons.
8	May 21	Students in the class	Instructions for final paper; students' presentations about their final papers
9	May 28	MEMORIAL DAY HOLIDAY	

PAPERS ARE DUE BY 5 P.M. ON FRIDAY, JUNE 8. TURN THEM IN AT DR. KATHY FRENCH'S OFFICE (Pacific Hall 3123B).

Course Assignments/Grading

Students will earn a letter grade (or a grade of P/NP) in the course based on the following scheme:

1. Attendance (25%)

For 8 weeks, the class will meet for approximately 2 hours each week. Each student can miss one session with no penalty (although we hope you won't miss any classes), but more than one absence will degrade the course experience and lower the grade. **The official record of**

attendance is a sign-in sheet that will be available at every class meeting. Be SURE to sign in every week.

2. Readings and discussion questions (25%)

Each speaker will choose approximately two papers from the primary research literature, and these papers are the assignment for the next week's talk. Assigned papers will be sent in an e-mail message to you that will include the papers in PDF format. You'll receive this message approximately one week before the speaker talks to us, so be sure to look for it. **(Please notice!! There is no TED site for this course. ALL of our course communication will take place via e-mail to your @ucsd.edu address, so please keep your e-mail box available and check it regularly.)**

To help prepare students for what they will hear each week, every student in the class is expected to have read the assigned papers BEFORE the associated class session. To facilitate the post-lecture discussion, each student will write and submit in advance TWO interesting questions based on the papers that they read and that they would like to discuss with the speaker. **Questions should be sent to Dr. Kathy French (kfrench@ucsd.edu), and they will be due by 5:30 p.m. on the Sunday before each class meeting (that is, the evening just before the class meets).** You should be prepared to ask your questions if I call on you during the discussion period. **If you will miss a class, you will still be expected to read the papers and submit two questions.**

3. Final paper (50%)

Each student will write a paper that elaborates on a topic of his or her choice, but **your topic should have been introduced or covered by one of the speakers during the course.** The papers must be properly formatted AND must cite at least ONE extra source from the primary research literature. You are welcome to cite the assigned papers, but you must include at least one source beyond the reading assignment for that topic. **This paper--and any others that are cited--must be from the peer-reviewed scientific literature (not from a Website like WebMD). The paper must be 3 pages long, with 1-inch margins, written in 12-pt Times New Roman or 11-pt Arial, and double-spaced.** A hard copy of the paper must be turned in **by 5 p.m. on Friday, May 27**, to Dr. Kathy French or to her office (Pacific Hall 3123B). If there's no one in my office when you bring your paper, slide your paper under my office door.

Learning Goals

We expect this course to:

- foster in students the oral and written skills that contribute to successful scientific communication
- promote students' development as scientifically trained individuals who are also sensitive to the social, political, cultural, and ethical context of scientific research
- educate students about the continuing contributions of scientists at UCSD and other local institutions to research that addresses the medical and ethical challenges of today
- develop students' skill in discussing important topics in biology and medicine, especially their broader social and ethical implications