

NST 11
Introduction to Toxicology
3 units

General Information

Class Hours: Tuesday and Thursday, 10-11am, 100 Lewis

Discussion sections: See online schedule of classes

Course website: See: <https://bcourses.berkeley.edu/courses/>

Required Text: none

Instructors:

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Graduate student instructors:

Di Yang
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Discussion session 105, 106

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Discussion session 103, 104

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Discussion session 101, 102

Course Objectives:

1. To become familiar with the fundamental concepts toxicology.

2. To become aware of important toxic hazards in the local environment.
3. To develop knowledge of the impact of toxins in the world.

Examinations:

There are three examinations in this class and each is 100 points. The attendance and pop quizzes in the required discussion will be worth a total of 100 points for the semester. The maximum total points for the examinations and quizzes for the semester will be 400 points. For grade, total points 380-400 is A+, 340-379 is A, 320-339 is A-, 300-319 is B+, 260-299 is B, and 240-259 is B-. The exams will cover material from the previous 4-5 weeks of the course. There is no question from the guest lectures in the exam.

Midterm Exams: Two quizzes on the following dates: February 16 and March 17.

Final Exam: Exam group 19: Friday May 15th, 3:00-6:00 p.m.

Introduction to Toxicology

COURSE OUTLINE

<u>Lecture</u>	<u>Day</u>	<u>Date</u>	<u>Topic</u>
1.	Tues.	Jan. 19	Introduction and Fundamental concepts of toxicology-1 (WW)
2.	Thurs.	Jan. 21	Fundamental concepts of toxicology-2 (WW)
3.	Tues.	Jan. 26	(DN)
4.	Thurs.	Jan. 28	Ethanol, Nicotine, and Caffeine-1 (WW)
5.	Tues.	Feb. 2	Ethanol, Nicotine, and Caffeine-2 (WW)
6.	Thurs.	Feb. 4	Carcinogenesis-1 (WW)
7.	Tues.	Feb. 9	Carcinogenesis-2 (WW)
8.	Thurs.	Feb. 11	Guest Lecture—Tyrone Hayes
9.	Tues.	Feb. 16	Quiz #1 (WW)
10.	Thurs.	Feb. 18	Neurotoxins (DN)
11.	Tues.	Feb. 23	Street Drugs and Addiction (DN)
12.	Thurs.	Feb. 25	Street Drugs and Addiction (DN)
13.	Tues.	March 1	Guest Lecture—John Casida—Chemical Warfare Agents
14.	Thurs.	March 3	Guest Lecture—Martyn Smith—Benzene
15.	Tues.	March 8	Pesticides and GMO's vs. Organic Foods (DN)
16.	Thurs.	March 10	Pesticides and GMO's vs Organic Foods (DN)
17.	Tues.	March 15	Drug Development and Toxicology (DN)
18.	Thurs.	March 17	Quiz #2 (DN)
19.	March 21-25		Spring Break
20.	Tues.	March 29	Drug Development and Toxicology (DN)

21. Thurs. March 31 Endocrine Disrupter-1 (WW)
22. Tues. April 5 Endocrine Disrupter-2 (WW)
23. Thurs. April 7 Guest Lecture—Tom Carlson—Ethnobotany and Ethnopharmacology
24. Tues. April 12 Obesogen-1 (WW)
25. Thurs. April 14 Guest Lecture—Len Bjeldanes—Diet and Cancer?
26. Tues. April 19 Obesogen-2 (WW)
27. Thurs. April 21 Heavy Metals (WW)
28. Tues. April 26 Guest Lecture-Dale Leitman-Breast Cancer epidemic: Why?
29. Thurs. April 28 The Concept of Toxicogenomics/Pharmacogenomics (WW)

30. May 2 - 6 Reading and review

Final Exam: Group, Friday May 15th, 3:00-6:00 p.m.