

NST 110: Toxicology (4 units)

General Information

Class Hours: Tuesday and Thursday, 8:00-9:30, 101 Morgan Hall

Faculty instructors: Jen-Chywan (Wally) Wang, 231 Morgan Hall
Phone: 510-643-1039
Email: walwang@berkeley.edu
Office hours: Monday 3-4 pm, or by appointment

Daniel Nomura, 127 Morgan Hall
Phone: 510-643-7258
Email: dnomura@berkeley.edu
Office Hours: Tuesday/Thursday 9:30-10:30am
Tuesday/Thursday 4-5pm
By google-messaging (dnomura@berkeley.edu)
By skype (SN: danielnomura)
Or by appointment

Graduate Student Instructors

Breanna Ford
Email: breannadrew@berkeley.edu
Office hours: Tuesday 3-4, 124 Morgan Hall

Jinnie Chen
e-mail: tcchen@berkeley.edu
Office hours: Fridays 9:30-10:30, 124 Morgan Hall

Prerequisites: Organic chemistry, biochemistry and a course in biology

Optional Text: *Casarett & Doull's Toxicology - the Basic Science of Poisons*, 7th ed. C.D. Klaassen, editor. (online)
<http://site.ebrary.com/lib/berkeley/docDetail.action?docID=10211741>

Course website: bcourses.berkeley.edu

Course Objectives:

1. To become familiar with basic chemical and biological aspects of toxicology.
2. To describe and evaluate the toxicology of certain natural and man-made environmental substances.
3. To appreciate certain current research issues important to toxicology.

Examinations:

Exams: Two exams on the following dates: 10/6 and 11/3

Final Exam: will be posted by campus

If the student has an emergency, which prohibits him/her to attend the exam, the student needs to provide an appropriate prove to get the permission for a make up exam. The make up exam shall be scheduled within 2-3 days of original exam date.

Grading:

Grading is based on points earned from two midterms (100 pts. each), a final (100 pts.) and work in the required Discussion section (100 pts total) (80 pts quizzes, 20 pts participation) for a total of 400 points. Final exam contains 30% of questions from first two sections. Grading scale: A: 80-100 %; B: 60-80%; C: 40-60%; D: 20-40 %; F: 0-20 %

Course Website on Berkeley BCourses:

All students are required to sign up for the course website on Berkeley BCourses at bcourses.berkeley.edu as soon as possible. All PowerPoint and PDF format lectures and handouts, as well as any class announcements, will be posted on Bcourses.

Toxicology, Fall 2015

COURSE OUTLINE

Lecture #	Date	Topic
DN1	Thurs Aug 27	Introduction, description of the course, Principles of toxicology
DN2	Tues Sept 1	Absorption and Distribution
DN3	Thurs Sept 3	Metabolism—Phase I
DN4	Tues Sept 8	Metabolism/Bioactivation—Phase I/II
DN5	Thurs Sept 10	Metabolism/Bioactivation/Regulation—Phase I/II
DN6	Tues Sept 15	Review/Examples of Absorption/Distribution/Phase I/II
DN7	Thurs Sept 17	Excretion/Toxicokinetics
DN8	Tue Sept 22	Mechanisms of Toxicity-1
DN9	Thurs Sept 24	Mechanisms of Toxicity-2
DN10	Tue Sept 29	Carcinogenesis
DN11	Thurs Oct 1	Carcinogenesis
	Tues Oct 6	EXAM # 1
DN12	Thurs Oct 8	Neurotoxicology-1
DN13	Tue Oct 13	Neurotoxicology-2
DN14	Thurs Oct 15	Pesticide Toxicology
WW1	Tue Oct 20	Nuclear Receptors in Toxicology-1
WW2	Thurs Oct 22	Nuclear Receptors in Toxicology-2
FS1	Tues Oct 27	Immunotoxicology
WW3	Thurs Oct 29	Metals

**Department of Nutritional Sciences and Toxicology
University of California at Berkeley**

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Toxicology**

<u>Lecture</u>	<u>Day</u>	<u>Date</u>	<u>Topic</u>
	Tues	Nov 3	EXAM #2
WW4	Thurs	Nov 5	Developmental/Reproductive Toxicology
DN15	Tues	Nov 10	Risk Assessment
DN16	Thurs	Nov 12	Pharmaceutical Toxicology
WW5	Tues	Nov 17	Plant Toxins
WW6	Thurs	Nov 19	Fungal Toxicology
WW7	Tues	Nov 24	Marine Toxins
	Thurs	Nov 26	Thanksgiving Holiday
DN17	Tue	Dec 1	Next steps in Toxicology
	Thurs	Dec 3	Review

DN: Daniel Nomura
WW: Wally Wang
FS = Fenna Sille