# Chemistry 14D Organic Reactions and Pharmaceuticals **Spring 2010**

## http://www.chem.ucla.edu/14D-S10/

#### Instructor:

Professor Neil Garg 5505C Molecular Sciences Email: neilgarg@chem.ucla.edu

Office hours: Wed: 2-3p; Thu: 1:30-2:30p

### Lectures:

WG YOUNG CS50

MWF 1:00 p.m.-1:50 p.m. March 29 – June 4, 2010

No Class on May 31 (Memorial Day)

## Teaching Assistants:

TA	Email	Office Hours	Discussion
		(5241 Mol Sci)	Sections
Amanda Silberstein	alsilber@chem.ucla.edu	Tues, 10–11am	A, B, C
Adam Goetz	goetz.adam@gmail.com	Wed, 2–3pm	D, E, F
Stephen Ramgren	sramgren@ucla.edu	Thurs, 11am–12pm	G, H, I
Grace Chiou	gr.chiou@gmail.com	Fri, 9–10am	J, K, L

#### Discussion Sections:

Discussions sections provide an opportunity for you to informally discuss concepts and solve problems with your TA and classmates. Although attendance at discussion section will not be strictly enforced, you may earn up to 3% extra 'participation' points. Your TA will determine your participation grade, if any, at the end of the quarter.

You may attend sections other than the one you are enrolled in. However, you must obtain permission from the TA prior to attending a different section.

Section	When?	Where?	TA
A	Tues. 8:00–8:50am	Lakretz 120	Amanda
В	Tues. 9:00–9:50am	Geology 4645	Amanda
C	Tues. 1:00–1:50pm	WGYOUNG 2200	Amanda
D	Wed. 8:00–8:50am	Geology 6704	Adam
Е	Wed. 10:00–10:50am	MS 5148	Adam
F	Wed. 12:00–12:50pm	Botany 133	Adam
G	Thurs. 8:00–8:50am	Botany 133	Stephen
Н	Thurs. 9:00–9:50am	Geology 6704	Stephen
I	Thurs. 1:00–1:50pm	Geology 4645	Stephen
J	Fri. 8:00–8:50am	WGYOUNG 1044	Grace
K	Fri. 10:00–10:50am	Botany 133	Grace
L	Fri. 12:00–12:50pm	Botany 133	Grace

#### Course Materials

- 1. "Organic Chemistry: Structure and Function" (Vollhardt and Schore; 5th edition) and Study Guide ISBN: 9780716778523 (REQUIRED)
- 2. Any Molecular Model Kit; One option: HGS Molecular Structure Model (set: manual and kit) ISBN: 9780716748229 (**REQUIRED**)
- 3. Turning Technologies ResponseCard RF LCD / 'Classroom Clicker' Available at the UCLA Store *Please note: these will be stored behind the cashier, not on the shelf* (**REQUIRED**)
- 4. "Chemistry 14D Thinkbook" (Hardinger; 2009 Edition)
  ISBN: 9780738032450 (OPTIONAL, BUT HIGHLY RECOMMENDED)
- 5. "Organic Chemistry as a Second Language" (Klein; 2nd Edition) ISBN: 9780470129296 (OPTIONAL)

## Virtual Office Hours:

In addition to asking questions at the regular set office hours listed on the Teacher's page, you may submit questions using Chem 14D Virtual Office Hours (http://voh.chem.ucla.edu/). Simply login, 'ask a question', and we will post a solution within 24 hours (or we will reply to you individually).

#### **Problem Sets:**

We will post problem sets on the course webpage (written by your TAs) and the corresponding answer keys. It is highly recommended (although not required) that you do all of these problems on your own before looking at the solutions.

#### Exams / Grades:

25% Exam 1 (April 23, 2010, in class) 25% Exam 2 (May 14, 2010, in class) 50% Final Exam (June 10, 2010; 11:30AM–2:30PM)

\*The TAs can assign up to 3% extra points to those who actively participate in discussion sections

You will not receive a letter grade on individual exams. Your final course grade will be determined based on the percentages shown above and will be 'curved'.

There will be no make-up exams, unless you have presented a superior reason. This reason must be presented before the exam is given, except for serious medical emergencies. In all cases, be prepared to provide documentation to verify your reason for missing the exam. Appropriate document includes a medical excuse from student health services, a letter on a physician's letterhead with phone number, signed and dated police report, etc. Holiday or vacation travel cannot be accepted as an excuse, especially for a final, so please plan ahead of time. Submission of an excuse automatically gives consent for its verification.

## Chem 14D – Spring 2010 – Schedule of Lectures

DATE	LECTURE TOPIC	BOOK CHAPTER
March 29 (Monday) March 31 (Wednesday) April 2 (Friday)	Course Introduction / Review Ionic Substitution/ $S_N2$ Ionic Substitution/ $S_N2$	Chapter 6 Chapter 6
April 5 (Monday) April 7 (Wednesday) April 9 (Friday)	Ionic Substitution/ $S_N$ 2 Ionic Substitution/ $S_N$ 1 Elimination Reactions	Chapter 6 Chapter 7 Chapter 7
April 12 (Monday) April 14 (Wednesday) April 16 (Friday)	Elimination Reactions Alcohol Synthesis Alcohol Synthesis	Chapter 7 Chapter 8 Chapter 8
April 19 (Monday) April 21 (Wednesday) April 23 (Friday)	Reactions of Alcohols Reactions of Alcohols/Epoxides EXAM #1 (in class)	Chapter 9 Chapters 9
April 26 (Monday) April 28 (Wednesday) April 30 (Friday)	Reactions of Alkenes Reactions of Alkenes Reactions of Alkenes	Chapter 12 Chapter 12 Chapter 12
May 3 (Monday) May 5 (Wednesday) May 7 (Friday)	Reactions of Alkenes/Alkynes Delocalized π Systems/Diels–Alder Electrophilic Aromatic Substitution	Chapters 12/13 Chapter 14 Chapters 15/16
May 10 (Monday) May 12 (Wednesday) May 14 (Friday)	Electrophilic Aromatic Substitution Radicals EXAM #2 (in class)	Chapters 15/16 Chapter 3
May 17 (Monday) May 19 (Wednesday)	Carbonyls: Aldehydes and Ketones Carbonyls: Aldehydes and Ketones	Chapter 17 Chapter 17
May 21 (Friday)	Enols and Enolates	Chapter 18
May 24 (Monday) May 26 (Wednesday) May 28 (Friday)	Enols and Enolates Carboxylic Acids Carboxylic Acids	Chapter 18 Chapter 19 Chapter 19
May 31 (Monday) June 2 (Wednesday)	NO CLASS   Carboxylic Acid Derivatives	MEMORIAL DAY Chapter 20
June 4 (Friday)	Carboxylic Acid Derivatives	Chapter 20
June 10 (Thursday)	FINAL EXAM (11:30AM – 2:30PM)	