

# 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](mailto:neilgarg@chem.ucla.edu)  
Office hours: TBA

#### **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 (5241 Mol Sci)	Discussion Sections
Amanda Silberstein	<a href="mailto:alsilber@chem.ucla.edu">alsilber@chem.ucla.edu</a>	Tues, 10–11am	A, B, C
Adam Goetz	<a href="mailto:goetz.adam@gmail.com">goetz.adam@gmail.com</a>	Wed, 2–3pm	D, E, F
Stephen Ramgren	<a href="mailto:sramgren@ucla.edu">sramgren@ucla.edu</a>	Thurs, 11am–12pm	G, H, I
Grace Chiou	<a href="mailto:gr.chiou@gmail.com">gr.chiou@gmail.com</a>	Fri, 9–10am	J, K, L

#### **Discussion Sections:**

Discussion 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
B	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
E	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
H	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

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