

# Chemistry 14D

## Organic Reactions and Pharmaceuticals

### Spring 2011

<http://www.chem.ucla.edu/14D-S11/>

#### **Instructor:**

Professor Neil Garg  
5505C Molecular Sciences  
Email: [neilgarg@chem.ucla.edu](mailto:neilgarg@chem.ucla.edu)  
Office hours:  
Wed: 4:30-5:30pm, Thur: 9:30-10:30am

#### **Lectures:**

WG YOUNG CS50  
MWF 1:00 p.m.–1:50 p.m.  
March 28 – June 3, 2011  
*No Class on May 30 (Memorial Day)*

#### **Teaching Assistants:**

TA	Email	Office Hours (5241 Mol Sci)	Discussion Sections
Noah Fine Nathel	<a href="mailto:noahfn@chem.ucla.edu">noahfn@chem.ucla.edu</a>	Tues, TBA	A, B, C
Joel Smith	<a href="mailto:joelsmith@ucla.com">joelsmith@ucla.com</a>	Wed, TBA	D, E, F
Stephen Ramgren	<a href="mailto:sramgren@ucla.edu">sramgren@ucla.edu</a>	Thurs, TBA	G, H, I
Evan Styduhar	<a href="mailto:styduhar@chem.ucla.edu">styduhar@chem.ucla.edu</a>	Fri, TBA	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. Note: you are only eligible for extra credit if you have a clicker device (must be registered). See the course website for details.

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	Boelter 4283	Noah
B	Tues. 9:00–9:50am	Boelter 5252	Noah
C	Tues. 1:00–1:50pm	Boelter 5252	Noah
D	Wed. 9:00–9:50am	Boelter 5264	Joel
E	Wed. 10:00–10:50am	WGYOUNG 2200	Joel
F	Wed. 12:00–12:50pm	MS 5203	Joel
G	Thurs. 8:00–8:50am	Boelter 5252	Stephen
H	Thurs. 9:00–9:50am	WGYOUNG 1044	Stephen
I	Thurs. 1:00–1:50pm	WGYOUNG 1044	Stephen
J	Fri. 8:00–8:50am	WGYOUNG 1044	Evan
K	Fri. 9:00–9:50am	Geology 6704	Evan
L	Fri. 12:00–12:50pm	WGYOUNG 1044	Evan

## ***Course Materials***

1. "Organic Chemistry: Structure and Function" (Vollhardt and Schore; 5th or 6<sup>th</sup> edition) and Study Guide. ISBN: 9780716778523 or 9781429271479 **(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' or equivalent device. See course website for details. **(REQUIRED)**
4. "Chemistry 14D Thinkbook" (Hardinger; 2010 Edition) ISBN: 9780738032450 **(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 15, 2011, in class)

25% Exam 2 (May 13, 2011, in class)

50% Final Exam (June 6, 2011; 3:00 PM–6:00 PM)

You will not receive a letter grade on individual exams. Your final course grade will be determined based on the grading scale below. Note, I may choose to adjust the grading scale in the event that exam averages are lower than I anticipate (this will only work to your benefit).

>95 = A+	80.0–84.9 = B+	63.0–69.9 = C+	43.0–49.9 = D+
90.0–94.9 = A	75.0–79.9 = B	56.0–62.9 = C	36.0–42.9 = D
85.0–89.9 = A–	70.0–74.9 = B–	50.0–55.9 = C–	30.0–35.9 = D–

\*The TAs can assign up to 3% extra points to those who actively participate in discussion sections. These points will be added to your weighted exam average before your letter grade is assigned. Note: you are only eligible for extra credit if you have a clicker device (the device must be registered; see course website for details). There will likely be a second extra credit opportunity available toward the end of the quarter.

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 2011 – Schedule of Lectures

<u>DATE</u>	<u>LECTURE TOPIC</u>	<u>BOOK CHAPTER</u>
March 28 (Monday)	Course Introduction / Review	
March 30 (Wednesday)	Ionic Substitution/S <sub>N</sub> 2	Chapter 6
April 1 (Friday)	Ionic Substitution/S <sub>N</sub> 2	Chapter 6
April 4 (Monday)	Ionic Substitution/S <sub>N</sub> 2	Chapter 6
April 6 (Wednesday)	Ionic Substitution/S <sub>N</sub> 1	Chapter 7
April 8 (Friday)	Elimination Reactions	Chapter 7
April 11 (Monday)	Elimination Reactions	Chapter 7
April 13 (Wednesday)	Alcohol Synthesis	Chapter 8
<b>April 15 (Friday)</b>	<b>EXAM #1 (in class)</b>	
April 18 (Monday)	Alcohol Synthesis	Chapter 8
April 20 (Wednesday)	Reactions of Alcohols	Chapter 9
April 22 (Friday)	Reactions of Alcohols/Epoxides	Chapter 9
April 25 (Monday)	Reactions of Alkenes	Chapter 12
April 27 (Wednesday)	Reactions of Alkenes	Chapter 12
April 29 (Friday)	Reactions of Alkenes	Chapter 12
May 2 (Monday)	Reactions of Alkynes	Chapters 13
May 4 (Wednesday)	Delocalized $\pi$ Systems/Diels–Alder	Chapter 14
May 6 (Friday)	Electrophilic Aromatic Substitution	Chapters 15/16
May 9 (Monday)	Electrophilic Aromatic Substitution	Chapters 15/16
May 11 (Wednesday)	Electrophilic Aromatic Substitution	Chapters 15/16
<b>May 13 (Friday)</b>	<b>EXAM #2 (in class)</b>	
May 16 (Monday)	Carbonyls: Aldehydes and Ketones	Chapter 17
May 18 (Wednesday)	Carbonyls: Aldehydes and Ketones	Chapter 17
May 20 (Friday)	Enols and Enolates	Chapter 18
May 23 (Monday)	Enols and Enolates	Chapter 18
May 25 (Wednesday)	Carboxylic Acids	Chapter 19
May 27 (Friday)	Carboxylic Acids	Chapter 19
<b>May 30 (Monday)</b>	<b>NO CLASS ☹</b>	<b>MEMORIAL DAY</b>
June 1 (Wednesday)	Carboxylic Acid Derivatives	Chapter 20
June 3 (Friday)	Carboxylic Acid Derivatives	Chapter 20
<b>June 6 (Monday)</b>	<b>FINAL EXAM (3:00 PM – 6:00 PM)</b>	