ORGANIC CHEMISTRY (CHEM 220A)
FALL 2014; Tuesday and Thursday 8:00-9:15, HSCI 103

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Office Hours: Tuesday 10:00–11:00 AM (HSCI 354)
Thursday 10:00–11:00 AM (HSCI 354)


Course Information on BeachBoard: All announcements, homework problem sets, handouts, and other course information will be posed on BeachBoard (http://beachboard.csulb.edu). Please check the site regularly.

Goals and Learning Outcomes
A primary goal of this course is to relate the structure of a compound to its reactivity and to introduce you to the theories developed to explain this reactivity. Throughout the course we will emphasize the importance of always asking “why?” a particular reaction proceeds in the manner described. You should not memorize an enormous amount of material throughout this course. Rather, you should develop an understanding of the chemical and structural principles underlying the reactivity of organic compounds and apply these principles towards solving problems in organic chemistry. Upon successful completion of the course, students will have a solid foundation in mechanistic organic chemistry. An understanding of the basic structures, properties, and reactivity of molecules will be a foundation for additional study in chemistry and biochemistry. Further, the problem solving skills developed in this course will be applicable throughout your scientific career. An additional goal for this course is for you to obtain an appreciation for why organic chemistry is an important topic for both physical and biological science majors.

Lectures
It is my goal to help you learn and understand the material. Lecture will cover the topics in the textbook, but sometimes with a different emphasis. The lectures are not a substitute for reading the textbook, and reading the textbook is not a substitute for attending the lectures. You are responsible for knowing both the material in the textbook and the material covered in the lectures.

Reading
It is of upmost importance that you keep up with reading the textbook and come prepared to the lectures. You should read the material in the text before the lecture. You will find that you will benefit enormously from the lectures when you come prepared with an understanding of the introductory material presented in the textbook. Falling behind prevents you from taking the time needed to comprehend the material.

CHEM 224. The department currently offers CHEM 224 (Organic Chemistry Recitation) – a new one unit class associated with the CHEM 220A lecture. CHEM 224 is a 50-minute weekly problem solving session emphasizing principles learned in the lecture. These sessions are designed to help you learn the very difficult material covered in the lecture. Students work with experienced department
faculty in a small group environment using active learning strategies. You are highly encouraged to enroll in one of the sections below. Additionally, students repeating CHEM 320A or 322A ARE REQUIRED to enroll in CHEM 224.

Fall 2014 Lecture (Approximate) and Exam Schedule

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<td>16</td>
<td>12/9</td>
<td>12</td>
<td>Alcohols from Carbonyl Compounds</td>
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Final Exam: Thursday, December 11, 2014 8:00 AM – 10:00 AM (HSCI 103)

**Review Quiz**
The second class meeting (Thurs. 8/28) we will have a review quiz covering material from general chemistry that is necessary to have mastered before delving into organic chemistry. The quiz is worth 30 points and cannot count as a dropped quiz. Depending on your performance, you may be strongly encouraged to enroll in CHEM 224.

**Exams**
The approximate scheduled dates for exams (subject to change due to lecture progress) are indicated on the lecture schedule. Students are strongly urged to plan activities and trips such that they do not conflict with the examination dates. The policy under “Class Attendance” in the university catalog will be followed for any make-up exam requests. Students must contact me in person FIVE DAYS BEFORE the day of the scheduled exam and must also present verifying documentation from your physician, family member(s), and/or proof of travel PRIOR to the exam date before I will allow a make-up exam.
**Quizzes**
There will be six quizzes worth 15 points each. The five highest quiz scores will be included in your grade, i.e., the lowest quiz score will be dropped. A missed quiz will automatically be the uncounted quiz score. There will be no make-up quizzes.

**Graded Homework Problem Sets**
Problems sets to be turned in for grading will be posted on BeachBoard at several times during the course. Problem sets will be posted one week before they are due. The problem set and due date will be announced at the lecture. Homework problem sets will together be worth 45 points.

**Grading**
Your total course grade will be determined on the basis of:

- **Exams and Review Quiz**
  - One 30 point review quiz (1 x 30 points)
  - Three 100 point exams (3 x 100 points)
  - One 150 point cumulative final exam (1 x 150 points)

- **Quizzes**
  - Five 15 point quizzes (5 x 15 points)

- **Homework problem sets**
  - 45 points (45 points)

Total 600 points

**Overall grades will be assigned according to the percentage scale (%):**

- A 100 – 85.0
- B 84.9 – 75.0
- C 74.9 – 65.0
- D 64.9 – 55.0
- F ≤54.9

**Students with Disabilities**
Will be accommodated as per university policy.

**College Withdrawal Policy**
The College Withdrawal Policy is posted on our class BeachBoard site. It can also be found by contacting either the College or the Department of Chemistry and Biochemistry. Please note that 9/8/14 is the deadline to withdraw without a “W”; 11/14/14 is the last day to drop without the Dean’s signature; 12/9/14 is the last day to drop with the Dean’s signature.

**Academic Honesty**
The highest standards of ethical conduct are expected. I will enforce all regulations outlined in the CSULB Catalog regarding cheating and plagiarism.
Achieving Success in Organic Chemistry
Effective studying is essential to doing well in organic chemistry. Effective studying means consistently spending time to read and review material, focusing on learning concepts (not memorizing), not getting behind, and doing problems. Working out problems is the most effective way to demonstrate to yourself that you have an understanding of the material. However, before working out problems you should first study your lecture notes and text to ensure you understand the principles and concepts covered. After obtaining a solid understanding of the principles, you can then apply them towards solving reaction problems. In addition, to be successful in organic chemistry you should not memorize solutions to particular problems. Rather, you should apply known concepts to predict reactivity and solve reaction problems. If you first take the time to understand the principles of organic chemistry, then the time spent working out problems will solidify the concepts you understand and will identify the concepts that remain unclear so you can seek additional explanation and clarification.