Chem 107B, Summer 2002 (term 2), UCSB – course syllabus

Time and location of lectures: Engineering 1, room 1104; MTWR from 11:00-12:05; 6-weeks August 5-September 12, 2002. The material covered in the lectures as well as the problems posted on the class web page (see below) during the quarter will form the foundation of the exams. You are expected to attend. No makeup exams unless I am notified in writing by a physician of a medical emergency.

Professor R. D. Little
Office: PSBN 3649C/D
Office hours: Tuesday 3-4 and by appointment
e-mail (please use, especially if you are not able to meet during office hours): little@chem.ucsb.edu
web site to access for course materials - (check it daily) http://www.chem.ucsb.edu/coursepages/ (choose this class).

Text: recommend that by P.Y. Bruice and that you examine other organic chemistry texts as well. The chapters and problems refer to the Bruice text, 3rd edition.

Web address for text: http://cwx.prenhall.com/bookbind/pubbooks/bruice2/ Here you can find practice quizzes and other study aides.

You should purchase a molecular model set to help you visualize in 3-D.

Other texts (library) you might find useful include those by – McMurry; Carey; Morrison & Boyd; Solomons; Raber and Raber; Hornback; Vollhardt and Schore; Jones; Brown & Foote; Loudon

TOPIC & CHAPTERS [9 CHAPTERS – SIX WEEKS]

Substitution and elimination
CHAPTERS 9 (nucleophilic substitution at saturated carbon), 10 (elimination reactions) & 11 (variations on chapters 9 and 10)

Carbonyl chemistry
CHAPTERS 17 (nucleophilic addition), 19 (chemistry of enols and enolates), 16 (addition-elimination to carboxylic acid derivatives), 18 (redox chemistry involving the carbonyl)

Aromatic chemistry of benzene and substituted benzenes
CHAPTERS 14 (aromaticity; electrophilic aromatic substitution) and 15 (substituent effects on the substitution process)
**Tentative schedule** (Holiday – Labor Day – Monday, September 2)

Read all of each chapter. *Use the lectures* to focus your reading – the lectures will guide you to what I consider the most important materials. Often, I will not cover all that is discussed in the chapters.

Week 1 (August 5-8) – chapter 9

Week 2 (August 12-15) – chapter 10 and 11

Week 3 (August 19-22) – chapter 17

Week 4 (August 26-29) – chapter 19

Week 5 (September 2-5) – chapter 16 and 18

Week 6 (September 9-12) – chapters 14 and 15

Recommended **PROBLEMS** – check the [class web site](http://www.chem.ucsb.edu/coursepages/) each day. I will add problems to the site during the week to reflect the most important points I expect to learn and to know. I will post solutions to the class web page, too. Again, the address is: [http://www.chem.ucsb.edu/coursepages/](http://www.chem.ucsb.edu/coursepages/) (then choose this class).

Other problems can be found in your text. Try your hand at those that appear within the chapter (as opposed to those at the chapter’s end … they’re fine, too, but don’t overwhelm yourself with too many problems). Let me be your guide … use the class web page site.

**EXAMS**

**NOTE RE MAKEUP EXAMS:**

No makeup exams unless I am notified in writing, by a physician, of a medical emergency.

- **Exam 1** (cumulative … that is, the material learned in the 1st quarter is fair game)–
  Wednesday August 14 – 100 points
- **Exam 2** (cumulative … 1st quarters and that from exam 1, too) – Wednesday September 4 – 100 points
- **Final exam** (cumulative) – 100 points