## **CHEM 2451** ORGANIC CHEMISTRY **WINTER QUARTER, 2007**

Instructor:

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Text:

"Organic Chemistry", Second Edition, by Joseph M. Hornback

Home Page: www.nsm.du.edu/organic

Problem Sessions: There is no formal recitation associated with this class. There are no weekly quizzes. Each week there will be a problem session on Tuesday at 8:00 AM. During this session the instructor will go over the homework problems and answer any questions you have about them or the previous week's lecture. Attendance at this session is optional, but if you are having trouble understanding something, try to come to the help session. If you have a conflict, make an appointment with the instructor.

Homework: In the lecture outline you will find a set of recommended homework problems for each chapter. You do not have to turn in these problems. However, make sure you do enough of them to be sure you understand them. Working these problems is the best way to learn the material and to prepare for the exams since the exam problems will be similar to the homework problems. Working the problems also tells you whether you really understand the material or not. It is important to keep up with the material as it is covered in class. Read your book and work the appropriate problems soon after the material is covered in class. If you fall behind, you will make the class much more difficult for yourself.

Exams:

There will be two 50 min. exams during the quarter and a cumulative final exam, each worth 200 points. If your final exam score is higher than one of your other exam scores, that exam score will be dropped and your final will count double. There will be no make-up exams. If you miss an exam, for any reason, it will have to count as the dropped exam. The final exam is not optional.

Clickers:

As was done in one section of General Chemistry last quarter, we will use clickers in class. Please register your clicker by sending me an email with your name and clicker serial number (a six-digit number located under the battery). We will begin using the clickers on Jan. 5.

**Grading:** 

Your final grade will be based on a maximum of 666 points, distributed as follows: hour exams and final exam, 600 points, attendance and class participation (clickers), 66 points.

## CHEM 2451 ORGANIC CHEMISTRY WINTER, 2007 Tentative Lecture Outline

DATE	TOPIC	PROBLEMS
Jan. 3	Chapter 1 A Simple Model for Chemical Bonds	Read pp. 1-25. Problems: 1-18, 21-24, 26, 36, 40, 41-44
Jan. 5	Chapter 2 Organic Compounds: A First Look	Read pp. 30-53. Problems: 1-35, 39, 40, 42-53
Jan. 8	continue Chapter 2	
Jan. 10	continue Chapter 2	
Jan. 12	Chapter 3 Orbitals and Bonding	Read pp. 61-97. Problems: 1-18, 20-31, 38, 40, 42-44
Jan. 15	No class	
Jan. 17	continue Chapter 3	
Jan. 29	continue Chapter 3	
Jan. 22	continue Chapter 3	
Jan. 24	Chapter 4 The Acid-Base Reaction	Read pp. 103-135. Problems: 1-37, 41-44, 49, 50
Jan. 26	continue Chapter 4	
Jan. 29	continue Chapter 4	
Jan. 31	Chapter 5 Functional Groups and Nomenclature I	Read pp. 142-172. Problems: 1-31, 33, 35, 43
Feb. 2	continue Chapter 5	

Feb. 5	Chapter 6 Stereochemistry I Cis-Trans Isomers and Conformations	Read pp. 178-214. Problems: 1-17, 19, 22-27, 30, 32, 34-38
Feb. 7	Exam 1	Chapters 1, 2, 3, and 4
Feb. 9	continue Chapter 6	
Feb. 12	continue Chapter 6	
Feb. 14	continue Chapter 6	
Feb. 16	Chapter 7 Stereochemistry II Chiral Molecules	Read pp. 219-244. Problems: 1-13, 16-23, 26-29, 32-36
Feb. 19	continue Chapter 7	
Feb. 21	continue Chapter 7	
Feb. 23	Chapter 8 Nucleophilic Substitution Reactions	Read pp. 257 - 302. Problems: 1-31, 34, 35, 40, 44-48, 50, 51, 53, 55, 57-60
Feb. 26	continue Chapter 8	
Feb. 28	EXAM 2	Chapters 5, 6, and 7
Mar. 2	continue Chapter 8	
Mar. 5	continue Chapter 8	
Mar. 7	Chapter 9 Elimination Reactions	Read pp. 313-325; 329-341. Problems: 1-8, 10 (omit d), 11-16, 17 (omit b, I), 18, 19, 24-28, 33, 36-39
Mar. 9	continue Chapter 9	
Mar. 12	continue Chapter 9	
Mar. 14	FINAL EXAM 7:00 - 8:45	Cumulative