

**CHEM 2453
ORGANIC CHEMISTRY**

FALL QUARTER, 2004

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Text: "Organic Chemistry", by Joseph M. Hornback

Help Sessions:

There is no formal recitation associated with this class. There will be no weekly quizzes. There will be a help session each Tuesday at 8:00 am. During these sessions I will go over the homework problems and answer any questions you have about them or the previous week's lecture. Attendance at these sessions is completely optional, but if you are having trouble understanding something, try to come to the help session. If you have a conflict, make an appointment by calling me at X12981.

Homework: In the lecture outline you will find a set of homework problems listed for each chapter. You do not have to turn in these problems. However, you should recognize the value of working the problems. This 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 also 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 three one-hour exams during the quarter and one 1.75-hour, cumulative final exam, each worth 200 points. If your lowest hour exam score is lower than your final exam score, the hour exam score will be dropped and the 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.

Grading: Your final grade will be based on the three exams and the final. The maximum point total is 800 points.

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Tentative Lecture Outline**

DATE	TOPIC	READING ASSIGNMENT & PROBLEMS
Sept. 13	Chapter 15 Nucleophilic Substitutions at the Carbonyl Group	Read pp. 693-739. Problems 15.1acd, 2, 3, 5-10, 13-16, 17abd, 18, 20-25, 27, 28, 33, 38bcdegh, 39, 40
Sept. 15	continue	
Sept. 17	continue	
Sept. 20	continue	
Sept. 22	Chapter 16 Enolate and Other Carbon Nucleophiles	Read pp. 751-795. Problems 16.1, 2, 4b-f, 5a-g, 6b-f, 7, 8b-d, 9-11, 12b-e, 14, 15, 16b-e, 17-21, 22b-d, 25, 26a-dfg, 27-29, 34-36.
Sept. 24	continue	
Sept. 27	continue	
Sept. 29	continue	
Oct. 1	continue	
Oct. 4	Chapter 17 Benzene and Aromatic Compounds	Read pp. 807-830. Problems 17.3-7, 9, 12-14, 16, 17, 20, 25.
Oct. 6	EXAM 1	Chapters 15 and 16
Oct. 8	continue Chapter 17	
Oct. 11	Chapter 18 Aromatic Substitution Reactions	Read pp. 837-889. Problems 18.1-16, 19-21, 23-27, 29, 30, 31a-f, 32bcd, 33-37, 40a-d, 45, 46.
Oct. 13	continue Chapter 18	

Oct. 15	continue	
Oct. 18	continue	
Oct. 20	Chapter 19 The Chemistry of Radicals	Read pp. 903-936. Problems 19.2-6, 8, 11-13, 16-20, 21abdefh, 22-26.
Oct. 22	EXAM 2	Chapters 17 and 18
Oct. 25	continue Chapter 19	
Oct. 27	continue	
Oct. 29	Chapter 20 Pericyclic Reactions	Read pp. 943-991. Problems 20.1-5, 6bc, 7, 8b-e, 9-21, 23, 25-27, 29, 30.
Nov. 1	continue	
Nov. 3	continue	
Nov. 5	continue	
Nov. 8	continue	
Nov. 10	Chapter 21 The Synthesis of Organic Compounds	Read pp. 1001-1009; 1170-1177. Problems 21.1-9; 25.22-24.
Nov. 12	EXAM 3	Chapters 19 and 20
Nov. 15	continue Chapter 21	
Nov. 17	Chapter 24 Carbohydrates	Read pp. 1103-1121. Problems 24.1, 2, 4, 5, 8-10, 14, 15, 17, 19.
Nov. 19	continue	
Nov. 20	FINAL EXAM	Cumulative (7:00 - 8:45 am)