

CHEMISTRY 61, SECTION 3
11:00 - 12:15 T,TH FALL 2002 VE 268
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PREREQUISITE: CHEMISTRY 21 OR 25H

OFFICE HOURS: MONDAY, 12 - 1 P.M.; TUESDAY 12:30 - 2 P.M.
OR BY APPOINTMENT

Text: *Organic Chemistry*, Brown and Foote, Third Edition
Organic Chemistry Student Study Guide, Brown and Foote, Third Edition
Organic Nomenclature, A Programmed Introduction, J.G. Traynham, 4th Edition

Lectures and Exam Dates

Date	Brown and Foote	Traynham
August 20, 22 August 27, 29 September 3, 5 September 10 September 12	Chapter 1 <i>Electronic Structure, Bonding</i> ; Chapter 2 <i>Alkanes and Cycloalkanes</i> Chapter 3 <i>Chirality</i> Chapter 4 <i>Acids and Bases</i> Chapter 5 <i>Alkenes I</i>	Chapter 1-6
September 17 (T)	Exam I Chapter 1-4 Brown and Foote, 1-6 Traynham	
September 19, 24, 26 October 1, 3 October 8, 15	Chapter 6 <i>Alkenes II</i> Chapter 7 <i>Haloalkanes, Alkenes, Arenes</i> Chapter 8 <i>Nucleophilic Substitution and Elimination</i>	
October 10 (Th)	Exam II Chapter 5-7 Brown and Foote, 7-12 Traynham	
October 17 October 22, 24 October 29 October 31, November 5 November 7	<i>Holiday, Fall Break</i> Chapter 9 <i>Alcohols and Thiols</i> Chapter 10 <i>Alkynes</i> Chapter 11 <i>Ethers, Sulfides and Epoxides</i> Chapter 12 <i>Infrared Spectroscopy</i>	
November 14 (Th)	Exam III Chapter 8-11 Brown and Foote	
November 12, 19 November 21, 26 November 28 December 3	Chapter 13 <i>Nuclear Magnetic Resonance</i> Chapter 14 <i>Mass Spectrometry</i> <i>Holiday, Thanksgiving</i> Review	
December 10 (Tue)	FINAL EXAM 12:00 noon. Ve 268	

Grading: Three hour examinations will be given at approximately monthly intervals (September 17, October 10, November 14). Students may drop the examination with the lowest grade of the three hour examinations. The final examination must be taken by all students registered in the course. The grade will be computed as follows: two hour exams (33% each) + final exam (33%). Improvement during the semester will be considered in the assignment of the final grade. **No makeup exams will be given.** If an exam is missed for any reason, that will be the one which is dropped.

STUDY TIPS FOR THE COURSE

Organic chemistry is a course which builds sequentially on material which has been presented earlier in the course. *It is essential that you do not fall behind. It becomes extremely difficult to catch up.* The best approach to mastering the material in this course is to keep up daily, therefore you should spend some time every day working on the course. It is significantly better to spend 30 minutes every day for seven days than to sit down and spend 3.5 hours one day a week on this course. Repetition is extremely important. It takes time to master some of the difficult concepts in this course and going back over certain ideas will make them much easier to comprehend. In addition, new ideas which you learn later in a chapter will often make earlier concepts more understandable. This is why repetitive studying and working every day is so important. If you are having difficulty with the course, get help as soon as possible. Waiting until half way through the semester is too late.

As soon as possible (within the first month) you should master the following:

- a. formula writing (Brown Chapter 2)
- b. structures and names of functional groups (Brown Chapter 1)
- c. basic nomenclature rules (Traynham Chapters 1-6, Brown pgs 56-66)
- d. stereochemistry (Brown Chapter 3)

REVIEW PROBLEMS:

Typically, the more problem solving you do, the better you will comprehend the concepts of the course. All the problems within the text of the chapter and at the end of the chapter are useful and will help if you work them. However, if time limitations prevent you from working all the problems, work only part of each problem such as the **a** and **b** part rather than **a, b, c, and d**. Problems which are representative of the material are listed below if you do not have time to work some part of all the problems..

MOLECULAR MODELS

Molecular models are useful for much of the course, particularly the sections on bonding and stereochemistry. Since stereochemistry becomes an integral part of the course after its introduction, models will also be useful later. Models cannot be used during the exams, however.

HONOR CODE:

Since all graded work (including homework to be collected, quizzes, papers, mid-term examinations, research proposals, laboratory results and reports, *etc.*) may be used in the determination of academic progress, no collaboration on this work is permitted unless the instructor explicitly indicates that some specific degree of collaboration is allowed. This statement is not intended to discourage students from studying together or working together on assignments which are not to be collected.

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STUDENTS LACKING THE PROPER PREREQUISITES WILL BE DROPPED FROM THE COURSE