

## **ORGANIC CHEMISTRY I (CHE 230)**

**Meeting Times:** MWF 8 – 8:50 AM, CP-139. Attendance is mandatory.

**Instructor:** Folami Ladipo, CP-109  
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**Office Hours:** Tuesday and Thursday, 10:00 -11:30 AM. You may also make an appointment for a particular time.

### **Important Dates:**

August 31 Last day to add class  
September 6 – Labor Day  
Sept. 15 Last day to drop with no record.  
Oct. 1 No Class (Fall Break)  
Oct. 18 Middle of term.  
Oct. 22 Last day to withdraw  
Nov. 26 No class (Thanksgiving holiday)

### **Course Description**

CHE 230 is the first course of a two-term sequence. This course covers the fundamentals of structure and reactivity of organic compounds, and on how these translate into the chemical and physical behavior that makes organic chemistry ubiquitous. We will also cover selected spectroscopic methods for the study of organic compounds. At the conclusion of this course, students who have learned the material will be able to discuss the 3 dimensional structure of most classes of organic compounds, to discuss the reactivity of alkanes, alkenes, and alkynes (and their derivatives) toward acids, bases, nucleophiles, and electrophiles, as well as to describe how the structure of organic compounds is assigned using mass spectrometry, IR spectroscopy, and nuclear magnetic resonance spectroscopy. In addition, successful students will be able to demonstrate an understanding of the reactivity of organic compounds through reaction mechanisms and to explain the kinetic and thermodynamic underpinnings of each mechanistic step.

### **Course Material - Required Text**

The required textbook for this course is Organic Chemistry, 3rd ed. by Maitland Jones, Jr. A set of Framework Molecular Models

is also required.

### Optional Texts

The Study Guide and Solutions Manual for Jones is strongly recommended. The books are expensive, but keep in mind that you'll use them for at least two semesters.

### **Course Coverage (Tentative)**

We will cover the first twelve chapters of your book and if time permits Chapter 13.

### **Examinations**

#### **NOTE NEW TIMES!!!**

- Exam 1: Wednesday, September 29, in class
- Exam 2: Wednesday, October 27, in class
- Exam 3: Wednesday, November 24, in class
- **Final Exam:** Thursday, December 16, 2004. 6:00-8:00 PM.

You may bring neither your molecular model kit nor a calculator to the exams. **All exams are cumulative.** Any subject covered on an earlier exam may reappear unexpectedly on any later exam.

### **Grading Policy**

4 Examinations    25% each

There will be no other graded assignments, but it is *strongly* advised that all students work problems from the book in order to test their own understanding of the course material.

The final assignment of letter grades will be based *approximately* on the following schedule:

A= 80+,  
B= 65-79,  
C= 50-64,  
D= 40-50  
E = <40

I reserve the right to raise or lower these divisions depending on the difficulty of exams and where breaks in the distribution occur. Grades are assigned on the basis of student performance, not proportions; in other words, students are not competing against each other for grades, and I am quite happy to give

most of the class A's and B's if the class has earned them.

If for some reason you have an academic conflict with any of these exam times, you must notify me within the first two weeks of the term. In accordance with University procedures, you must provide written notice, and this must be done for each exam with which you have a conflict.

Students may miss one exam if they have a documented, excused absence that conforms to the University Senate Rules. (See course bulletin board outside CP-139 in Rose Street corridor.) The documents must be presented within a week of the missed exam. Make-up exams will not be given; the student who misses an exam for a legitimate reason will have three scores for the semester instead of four. (Remember, all exams are cumulative; if you miss one exam, it doesn't mean that you don't have to learn the material!) Students with two documented, excused absences (from examination) will have their final exam count for two scores instead of one. Students who miss three or more exams or the final exam for any reason will receive an "E" unless the dean of their college permits them to withdraw. Students who miss an exam without an excuse will receive a zero for that exam at my discretion. If you miss an exam for any reason, even an undocumented one, please discuss the circumstances with me.

All exams will be returned to you after they have been graded. Please check them over for addition mistakes. If you were marked down for an answer that you think was correct, submit it to me with a brief written argument. Oral requests for regrading will not be entertained. Requests for regrading must be received within one week of the return date. A student who has changed an answer and presented it for regrading has cheated. He or she will accordingly receive an E in the class (the minimum punishment) and may be subject to further disciplinary action. In order to remove any temptation to do this, some exams will be photocopied before they are returned.

### **Problem Sets**

#### **Online Homework (EPOCH)**

Robert Grossman, Raphael A. Finkel and Prasanth Ramachandran have developed a Web-based organic chemistry homework program called [EPOCH](#). This program asks you to draw organic structures in response to a question. If your