Chemistry 210
Structure and Reactivity
Fall Term 2012

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Textbooks: S. N. Ege, *Organic Chemistry,* 5th Ed., Houghton Mifflin Co., 2003.
S. N. Ege, R. Kleinman, P. Zitek, *Study Guide for Organic Chemistry,* 5th Ed Houghton Mifflin Co., 2003.

Recommended: A set of Molecular Models.

Coursepack: 2012-13 Edition**:** available at bookstores (samples of previous exams & study advice).

Chemistry 210 uses the subject matter of organic chemistry as a vehicle for introducing fundamental concepts in chemistry, science, and general learning skills. The course will generally follow the topics suggested by the text. *However*, you should not expect (or want!) a simple recapitulation of the textbook examples. Use the lectures in two ways: first, as another perspective on the 'map of concepts' that links the examples together; and second, as a chance to see a more expert learner in action.

We will be exploring the ideas in Chapters 1-10. The exams will test your ability to project and apply the broad concepts to new and unfamiliar situations. Your grade will be based on your cumulative performance towards the course total of 600 points. Only exam mean and range values are determined for any individual examination. Letter grades are not assigned for individual examinations. Please see the course pack and web site for a detailed discussion about grading policies in this course.

Examinations:	Tuesday,	**Oct 2**	6:15-7:45 pm (100 points) *Ch 1-3*
	Tuesday,	**Oct 30**	6:15-7:45 pm (120 points) *Ch 4-6*
	Tuesday,	**Nov 27**	6:15-7:45 pm (140 points) *Ch 7-9*
Final Exam:	Monday,	**Dec 17**	10:30 am -12:30 pm (240 points) *Cumulative (1-10)*

Exam Rooms: see CTools site. Alternate times are for demonstrated conflicts only.

*Graded examinations will be available in the lower Atrium according to a schedule; see CTools and class for details. Please check your exams for adding/grading (clerical) errors. Regrade appeals go to faculty instructors (**in writing only**) for one week after exams are returned. Except for clerical errors, regrade requests will be a reevaluation of the entire exam. Documented cases of cheating are automatically sent to Academic Actions.*

Discussions: You are scheduled to attend a GSI-led discussion section each week. Whether you are prepared, or unprepared, there is always something to learn.

Open discussions with the faculty instructors begin Monday, Sept 17 in Room 1800 Chemistry:
Prof. Montgomery: 5:00-6:30 pm Prof. Nagorny: 6:30-8:00 pm Prof. Coppola: 8:00-9:30 pm

NOTE: On Monday, Sept 10, there will be an hour-long "learning tips for CHEM 210" session with Professor Coppola, who will do the talk twice: once at 6:30 pm and a repeat at 8:00 pm, both in Room 1800 Chemistry.

GSI Science Learning Center hours: see CTools & SLC sites (www.lsa.umich.edu/slc)

Chemistry 210 **Some advice** **Fall Term 2012**

• ***All text problems are assigned. Do these! Do not rely ONLY on old examinations.***
• Do not wait until just before exams to begin learning... you can use the course pack of examinations to help you know what you know, AND to know what you do not know!
• Read ahead for general meaning, multiple readings of information makes better connections. Do not feel compelled to understand every adverb the first time through.
• Learn the difference between "information" (*the multiplication tables*) and "understanding" (*creating and solving new multiplication problems*).
• Ideas are NOT just things to make lists of! Ideas should be tried out. At every point in the course, you should be able to put the name of a topic on a sheet of blank paper, close all of your books and notes, and explain the topic (like you were giving a lesson) in words and with examples you create. Learn how to teach this subject and you will develop test-taking skills!
• Do problems at a different time from when you are reading about ideas. Learn to understand what you know by also understanding what you do not know. Work back and forth between reading and studying time and problem-solving time as separate blocks. Do not link reading about a topic with all of its problems or else you will not be able to identify it again when you see it.
• Problems are solved by (1) identifying and (2) applying; if you can't do (1), it doesn't matter how well you do (2). If you cannot figure out what a problem is about, you cannot actually say you solved it.

A tentative outline

this schedule gives a good idea of timing, use class to guide you to what is actually going on

Tentative Outline

Lectures 1-7	(Wednesday, Sep 5 to Wednesday, Sept 19)	**Chapter 1 & 2**
Lectures 8-12	(Friday, Sept 21 to Monday, Oct 1)	**Chapter 3**
>>b/t Lect 12/13	***(Tuesday, Oct 2) Exam No. 1***	***(Ch. 1-3)***
Lectures 13-15	(Wednesday, Oct 3 to Monday, Oct 8)	**Chapter 4**
Lecture 16-19	(Wednesday, Oct 10 to Friday, Oct 19)	**Chapter 5**
Lectures 20-23	(Monday, Oct 22 to Monday, Oct 29)	**Chapter 6**
>>b/t Lect 23/24	***(Tuesday, Oct 30) Exam No. 2***	***(Ch. 4-6)***
Lectures 24-28	(Wednesday, Oct 31 to Friday, Nov 9)	**Chapter 7**
Lectures 29-34	(Monday, Nov 12 to Monday, Nov 26)	**Chapter 8 & 9**
>>b/t Lect 34/35	***(Tuesday, Nov 27) Exam No. 3***	***(Ch. 7-9)***
Lectures 35- 40	(Wednesday, Nov 28 to Mon, Dec 10)	**Chapter 10**
Monday, Dec 17	***FINAL EXAM cumulative***	

There are many resources available to you in this course. One key fact is finding that subset of them that works best for you, so do not be afraid to try things out (even if others are not doing them).

(1) Your textbook; (2) GSI recitation/discussion sections; (3) Open faculty discussions; (4) Open GSI hours at the Science Learning Center (see SLC); (5) the course pack - read the essays carefully; (6) informal peer study groups offered through the Science Learning Center; (7) form your own groups around discussing chemistry, commandeer classrooms or SLC corrals and teach each other the ideas.
URL for SLC: www.lsa.umich.edu/~slc

Course grade appeals must be made by first contacting the instructor (deadline: before the end of the first 15 days of the term in which the grade was assigned). A grievance may then be made before the end of the fifth week of that same term. The full appeal process is available at the course CTools site.