CHEMISTRY 4-172       Advanced Organic Chemistry       Fall 2011

Time:             MWF 9:30 - 10:20 am; W228 CB

Instructor:       Professor Hien Nguyen
Office:           E457 Chemistry Building
Phone:            319-384-1887
Email:            hien-nguyen@uiowa.edu
Office Hours:     Monday and Friday 1:00 - 2:30 pm or by appointment

Grader:           TA – Jessica Clark
Email:            jessica-j-clark@uiowa.edu

Textbooks:        Modern Organic Synthesis: An Introduction (required)
                  Advanced Organic Chemistry, Part A: Structure and Mechanism (required)
                  Molecular Model Set (required)
                  Undergraduate Organic Chemistry Textbook (Highly Recommended)

Exams:

EXAM I           Monday, 09/26       7:00 pm – 10:00 pm
EXAM II          Thursday, 10/27     7:00 pm – 10:00 pm
EXAM III         Thursday, 12/01     7:00 pm – 10:00 pm
FINAL EXAM       Friday, 12/16, 7:30 am – 9:30 am

Grading:

Unannounced Quizzes  100
Problem Sets         300
Exam I               100
Exam II              100
Exam III             100
Final Exam           100

Exams: If you know that you will miss an exam, please inform me at least two weeks in advance and provide the appropriate written documentation. I will then rearrange the time that will fit into your schedule. All exams are cumulative including the final exam.

Quizzes: There will be unannounced quizzes at the beginning of the lecture. Seven or eight quizzes will be given over the course of the semester, and the highest five quizzes will be counted in your final grade. There will be no make-up quizzes.

Homework: There will be 7-8 problem sets throughout the course of the semester. These problem sets will be graded.

Course Administration: A majority of course business can be achieved at the Chemistry Center, E225 CB. The hours are 8 AM -12 Noon & 12:30 – 4:30 PM on M-F, and the
contact person is Ms. Jessica Alberhasky (335-1341). The following issues SHOULD be achieved at the Chemistry Center: drop/add forms, section changes, and TA office hours.

Complaints: complaints and appeals can be filed at the Department of Chemistry offices located in E331 CB (335-1350).

**Tentative Schedule:**

1. **CONFORMATIONAL ANALYSIS**
   Reading: Chapter 2.1 - 2.5 in Modern Organic Synthesis
   Chapter 2.1 - 2.2 in Advanced Organic Chemistry

2. **STABILITY AND REACTIVITY**
   Reading: Chapter 2.6 - 2.8 in Modern Organic Synthesis
   Chapter 3.1 - 3.3 in Advanced Organic Chemistry

3. **INTRAMOLECULAR RING CLOSURE**
   Reading: Chapter 6.3 in Modern Organic Synthesis
   Handouts will be posted on ICON

4. **STEREOSELECTIVE AND STEREOSPECIFIC REACTIONS**
   Reading: Chapter 2.4 in Advanced Organic Chemistry

5. **NUCLEOPHILIC SUBSTITUTION**
   Reading: Chapter 4.1 - 4.4 in Advanced Organic Chemistry
   Handouts will be posted on ICON

6. **ELIMINATION REACTIONS**
   Reading: Chapter 5.10 in Advanced Organic Chemistry
   Handouts will be posted on ICON

7. **FORMATION OF C-C DOUBLE BONDS**
   Reading: Chapter 8 in Modern Organic Synthesis

8. **OLEFIN ADDITION REACTIONS**
   Reading: Chapter 2.6 - 2.8 and Chapter 5 in Modern Organic Synthesis
   Chapter 3.1 - 3.3 in Advanced Organic Chemistry
College Statement

Administrative Home: The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Questions may be addressed to 120 Schaeffer Hall or see the CLAS Student Academic Handbook [www.clas.uiowa.edu/students/academic_handbook/index.shtml].

Electronic Communication: University policy specifies that students are responsible for all official correspondences sent to their standard University of Iowa e-mail address (@uiowa.edu). Students should check this account frequently. (Operations Manual, III.15.2. Scroll down to k.11.)

Academic Fraud: Plagiarism and any other activities when students present work that is not their own are academic fraud. Academic fraud is a serious matter and is reported to the departmental DEO and to the Associate Dean for Undergraduate Programs and Curriculum. Instructors and DEOs decide on appropriate consequences at the departmental level while the Associate Dean enforces additional consequences at the collegiate level. See the CLAS Student Academic Handbook.

Making a Suggestion or a Complaint: Students with a suggestion or complaint should first visit the instructor, then the course supervisor, and then the departmental DEO. Complaints must be made within six months of the incident. See the CLAS Student Academic Handbook.

Accommodations for Disabilities: A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make arrangements. See www.uiowa.edu/~sds/ for more information.

Understanding Sexual Harassment: Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the University Comprehensive Guide on Sexual Harassment at www.uiowa.edu/~eod/policies/sexual-harassment-guide/index.html for assistance, definitions, and the full University policy.

Reacting Safely to Severe Weather: In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. (Operations Manual, IV.16.14. Scroll down to e. h. and i.)