

Syllabus, Chemistry 430-01, Spring 2009 (Graduate Version)

Disclaimer: this syllabus is tentative and may be subject to change if circumstances beyond my control require it.

Contact Information

Instructor name: Dr. Thomas Junk

Time of class: 8:00-9:15 a.m. TT

Office hours: see below

Instructor's e-mail: junk@ulm.edu

Room of class: CNSB243

Instructor's office: CNSB 112

Office phone: 342-1830

Website: <http://www.ulm.edu/~junk/home.html>

My schedule	Mo	Tu	We	Th	Fr
8:00-8:50 a.m.	231-01		231-01		231-01
8:00-9:15 a.m.		430-01		430-01	
9:00 -11:00 a.m.	Office Hr		Office Hr		Office Hr
11:00-11:50 a.m.		107 Recitation			
2:00-5:00 p.m.	232-01			233-05	
5:00-6:00 p.m.			232 Review		

Course Prerequisites/Corequisites

You must have passed Chem 232 and 322 (or equivalent courses) with a "C" or better.

Course Description, Objectives and Outcomes

A mechanistic study of prevailing organic reactions via structural and electronic effects will dominate the discussion. The objective will be to provide a greater appreciation, understanding, and application to mechanistic development and prediction. This course is based on F. A. Carey and R. J. Sundberg's *Advanced Organic Chemistry, Part A*.

Course Topics

Objectives: The course will familiarize you with the material of chapters 1-10 in our textbook, ch. 11 if time permits.

Instructional Methods and Activates

This course will be presented in form of overhead based lectures. These lectures closely reflect the material covered in the corresponding chapters of our text book. Additional instructional information and previous exams will be posted at <http://www.ulm.edu/~junk/coursestaught.html>.

Evaluation and Grade Assignment

Grading system, Dates: Two exams worth 100 points each will be given on the following dates: Feb 10, Mar 17. These generally will follow chapter breaks. Exams will take one class period each unless another agreement can be reached by all involved. A final will be given on Fr, May 8, 10:00-11:50 a.m., as assigned by ULM. It also will be worth 100 pts. In addition, there will be one 15 min presentation per student, worth 100 pts. All exams are **closed-book** unless announced otherwise. You **will** have access to a periodic table. Exams will emphasize the material not covered by previous exams, but will require knowledge of the basic concepts covered in previous chapters. There will be no quizzes.

Mid-term grades: ULM requires that I post mid-term grades for you by March 6. **Mid-term grades indicate a student's status at mid-semester only and do not indicate the final performance outcome!**

Class Policies and Procedures

Textbooks and materials: F. A. Carey and R. J. Sundberg's *Advanced Organic Chemistry, Part A: Structure and Mechanisms*, 4th ed (or more recent). Other required material: Model Kit.

Attendance policy: ULM policy mandates your attendance, and mandates that I verify your attendance.

Academic Integrity: If you cheat, you will get zero points on the exam or quiz. This will happen to you even if you are a cooperating “benefactor”, it is in your interest not to cooperate. You cannot drop zeros obtained as a result of cheating. For further details, please refer to <http://www.ulm.edu/studentpolicy/>

Course evaluation policy: Please complete the on-line course evaluation!

Student Services: Please note that the following ULM student services are available to you: Student Success Center <http://www.ulm.edu/cass/>, Counseling Center <http://www.ulm.edu/counselingcenter/>, Special Needs <http://www.ulm.edu/counselingcenter/special.htm>, Student Services <http://www.ulm.edu/studentaffairs/>.

Discipline, Course Specific Policies: If your cell phone rings you may face a penalty (typically, a point loss). Only **simple** (non-programmable) calculators are allowed or needed during exams.

Office hours and review sessions: Office hours are intended to discuss problems, allow you to see your exams, etc., **not** for review. Review sessions are optional and do not cover any new material. I will **not** interpret your absence during review sessions as a lack of effort/interest in this course. I will **not** discuss review questions or grades by telephone. Review sessions may be rescheduled to accommodate your exam schedule.

Readings: You are expected to follow the lecture by reading the corresponding chapters in the textbook. I will attempt to cover all exam material in class, but any information contained in the corresponding book chapters is fair game.

Participation in class: You are invited to **ask questions** in class during lecture!

Homework assignments: There will be no mandatory homework assignments, but suggested review problem sets. I will assign these during class and will be happy to discuss them with you.

Grading system: Letter grades will be based on the usual scale (A, 100%-90%; B, 89%-80%, etc.). However, I reserve the right to determine the final cut-off percentages for grades in response to non-representative (very small, exceptionally good, poor) classes. You cannot drop exams. Due to the small sizes of graduate classes at ULM there will be no formal curving.

Make-up policy: If you missed an exam due to an excused absence you should schedule a make-up with me at your earliest convenience.

Cheating: You will get zero points on the exam. This will happen to you even if you are a cooperating “benefactor”, it is in your interest not to cooperate. You cannot drop zeros obtained as a result of cheating.

Posting of exam results and answer keys: I will discuss the results of your exams and mistakes you made with you during office hours, they may not be posted due to the small class size.

Chapters covered:

1. Chemical Bonding and Structure
2. Principles of Stereochemistry
3. Conformational, Steric and Stereoelectronic Effects
4. Study and Description of Organic Reaction Mechanisms
5. Nucleophilic Substitution
6. Polar Addition and Elimination Reactions
7. Carbocations and Other Nucleophilic Carbon Species
8. Reactions of Carbonyl Compounds
9. Aromaticity
10. Aromatic Substitution
11. Concerted Pericyclic Reactions