

# CHEMISTRY 626, ORGANIC CHEMISTRY II

## *Line Number 54223*

Spring, 2008

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Chemistry 626 is the second half of a two-semester course in organic chemistry.

**TEXT:** Required: Janice Smith Organic Chemistry, 2nd Edition, McGraw-Hill, 2007 (ISBN 978-0-07-335670-9) the companion web site for the text is also available (Aris.mhhe.com)

**Optional -** Study Guide (Solutions Manual) for above text (highly recommended).  
Molecular Models (Available at the Union Bookstore and on reserve in Anschutz Library).

**Paul Hanson (4027 Malott): OFFICE HOURS:** MWF 11-noon; T 3-4 pm, Th 2-3 pm

**WEB SITE:** We will be using the Blackboard program. Go to <http://courseware.ku.edu>. This site will contain the course syllabus, schedule, problem assignments, problem sets and handouts in PDF format that you can download and print. Copies of *most* of the PowerPoint slides will be posted as we begin each chapter. Check here for announcements, sample exams and exam keys. If you have problems accessing the web site call the Blackboard Help Center at 864-0200. You must have a KU email address or register your email address with KU to utilize the web site and to receive email messages. If you need to register your email address or obtain a KU address for the first time, go to <http://www.ku.edu/computing/services>.

**EXAMS AND GRADING:** Your grade will be based upon your performance on the quizzes, hour exams and the final exam. The points will be distributed as follows:

Ten best quizzes	=	50 points
Three best hour exams	=	300 points
Final exam	=	<u>200 points</u>
Total possible points	=	550 points

**QUIZZES:** At least ten 5-point quizzes will be given in the last ten minutes of class on most Fridays. The best ten will be used in calculating your final grade. You must hand in a scantron sheet for a quiz to be graded.

The hour exams will be given on the following dates:

**Thursday, February 7** at 6:00 – 7:30 PM (Budig 120)

**Thursday, March 6** at 6:00 – 7:30 PM (Budig 120)

**Thursday, April 3** at 6:00 – 7:30 PM (Budig 120)

**Thursday, May 1** at 6:00 – 7:30 PM (Budig 120)

Your lowest score on the hour exams will be dropped. Copies of old exams will be posted on the course BB site. These are intended to give you an idea of the types of questions you can expect and the level of mastery of the material required. The **FINAL EXAM** (comprehensive) is scheduled for 7:30 AM – 10:00 AM on **Wednesday, May 14** (Budig 120). The examinations will be based upon the reading assignments, lecture material and problem assignments.

**NOTE:** You can opt out of the final exam if your lowest test score x 2 is used as your final exam score and this puts you over 90%, hence you have secured an A.

**Grading:** The most conservative grading scale will be:

90% and above	= A
80% - 89%	= B
70% - 79%	= C
60% - 69%	= D
Below 60%	= F

The graded examinations will usually be available by the first class following the examination. Please carefully check your exams for errors in grading. Any exam requiring regrading should be turned in immediately and you should indicate which questions you wish regraded by circling the number of that question of the first page of the exam.

\*\*\*No grades will be changed unless the exams are submitted for regrading before the next exam tune.

**ASSIGNMENTS:** Reading assignments in the text will be made as the semester progresses. As you study the text, work the problems within the chapters to be sure you understand the material. Problems at the end of each chapter will be assigned and some additional problem sets will be handed out. Solutions to the problem sets and hour exams will be posted on the bulletin board outside the organic labs on the fourth floor of Malott. Solutions to the problems from the text are available in the Solutions Manual. The problems are to be worked for your benefit and it is essential that you work as many problems as possible. Please keep a separate spiral notebook for your problems and faithfully keep up with the problem assignments. When you are having difficulty with any portion of the course please come to see me and bring your notebook containing your solutions to the assigned problems.

**HELP:** Help is easily available!

- 1) Use your textbook (note the end of chapter summaries, essential problem solving skills and key terms).
- 2) See Dr. Hanson. This is obvious but many students fail to consult the instructor for the course.
- 3) Attend problem sessions, absolutely crucial to attend at least one per week.
- 4) Work with your study group. There is no better way to learn than explaining material to your peers.
- 5) See your laboratory instructor during his or her office hours.

**PROBLEM SESSIONS:** Problem sessions will be held on Saturdays, Monday and Thursday/Friday nights at set times announced in class. Additional review sessions will be held the night before each examination and throughout the week as noted in class.

**STUDY AIDS:** Molecular models are extremely useful for studying conformational analysis and stereochemistry. They are available for purchase in the bookstore and are also available for two-hour checkout in the Science Library. Computer programs for visualizing molecules in three dimensions are available in the Chemistry-Physics computer lab. Details will be provided as the semester progresses.

**STUDY GROUPS:** You are urged to form study groups of three to five students with others from your laboratory section or living groups. Group members should plan to sit together for in-class problem sessions and Friday quizzes. Each group should establish a weekly meeting (1-2 hrs.) to discuss the week's material and review for quizzes and exams. Group study sections are one of the most efficient ways to learn organic chemistry.

**HOW TO STUDY ORGANIC CHEMISTRY:** Success in organic chemistry requires mastering a substantial body of factual information and the use of this information in the solution of problems. **You should plan a minimum of three hours of study and problem solving outside of class for every hour of lecture.** To study productively, you should carefully read the assignments, marking key items to be learned on each page. Pay particular attention to the "Essential Problem Solving Skills" listed at the end of each chapter. As you study the text and your lecture notes, train your hand to draw the structures of molecules and write equations and mechanisms. Build models of various structures and learn to translate these three dimensional structures onto paper. Get a large quantity of scratch paper and write, write, write!

Work as many problems as possible, in writing and in full detail. There is no other way to acquire the skills you will need to succeed in organic chemistry. Organic chemistry is a cumulative subject and the material you learn in the first week of the course will still be used at the end of the second semester of organic chemistry. Even though the assigned problems are not graded, it is extremely important that you work them. Struggle with a problem that you can't solve immediately. Don't give up and look up the answer. Review related material in your lecture notes and in the text. If you still can't solve the problem set it aside and try it again later. In this way you will gradually learn the important material without trying to memorize it.

You will also learn a way of thinking, of looking for patterns and similarities between seemingly unrelated ideas and facts. If you must look up the answer to a problem, be sure that you understand how to solve that type of problem. Organic chemistry requires a lot of hard work and consistent effort and studying. Don't try to memorize the text and cram before exams. If you do, you are courting disaster! An understanding of reactions is essential and although facts must be learned, they will quickly overwhelm you unless you understand the general principles and see the relationships among the facts.

1. Come to class every day, take careful notes, and read and rewrite the notes within 24 hours. Your notes are an important resource for study. Numerous studies have shown that lecture material loses its value if it is not reviewed in shortly after class.
2. Keep up. Organic chemistry is cumulative. This seems obvious, but failing to do so is the major reason for not doing well in the course.
3. Study actively. Write, write, write! Explain concepts to members of your study group. Work out strategies for solving various types of problems. Writing mechanisms is crucial to success in organic chemistry.
4. Work as many problems as possible. This is the only way to learn organic chemistry.
5. Keep a calendar. Know when exams are and plan your time so that you are not trying to learn material the night before the exam.
6. Be well rested before an exam. Because of the cumulative nature of organic chemistry it is not advisable to "pull an all-nighter" before exams.

**ACADEMIC MISCONDUCT:** Cheating or the appearance thereof, will not be tolerated. This includes, but is not limited to, giving or receiving help on an exam, looking at another student's paper during an exam, using unauthorized material, crib sheets, notes or the equivalent and falsifying exam papers. Cheating runs the real risk of being dismissed from the University. Familiarize yourself with published University regulations (see <http://www.studenthandbook.ku.edu/codes.shtml#Academic%20Misconduct>). The Instructor reserves the right to make and keep copies of individual examination papers.