

Simmons College
Department of Chemistry
Chemistry 114: Organic Chemistry I
Spring 2007

Professor Nancy E. Lee
Office Hours: Mon. & Wed. 12:30-2:00
Study Groups: Mon & Tues 4-7 in Study Area on 4th floor Science Bldg outside of chemistry stockroom.
Mon. & Tues 7-9PM in Residence Campus; Evan's Basement
Email address: lee@simmons.edu
Chem. 114 web site address: <http://web.simmons.edu/~lee/>

Office: S-440
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Texts and Required Materials:

John McMurry, Organic Chemistry, 6th Ed.,(Brooks/Cole, 2004) ISBN:0-534-38999-6
Organic Chemistry: A Guided Inquiry, 1st Ed. (Houghton Mifflin, 2004) ISBN: 0-618-30852-0
Susan McMurry, Study Guide and Solutions Manual, 6th Ed.,(Brooks/Cole, 2004) ISBN:0-534-40934-2
Fessenden & Fessenden, Organic Laboratory Techniques, 3rd Ed., (Brooks/Cole) ISBN 0-534-37981-8
Chem. 114 Experiments Module (available from the Chemistry Dept. Stockroom)
Molecular model set (available from the Chemistry Dept. Stockroom)
Laboratory notebook with numbered pages (can use the same one from Chem. 111 or 113)
A pair of safety glasses (available from the Chemistry Dept. Stockroom).

Exams: There will be three in-class exams and a final. If you miss an exam without a good excuse, you will receive a zero for the exam. The dates of these exams are as follows:

Exam I	Feb. 12, 2007 (Mon.)
Exam II	Mar. 21, 2007 (Wed.)
Exam III	Apr. 18, 2007 (Wed.)
Final	TBA

GIL (Guided Inquiry Learning): Attendance is mandatory for the problem solving sessions on Fridays. You will be assigned to a group of four students and will be solving problems together. Attendance and active participation in these sessions can count 10% of your grade. You can substitute the grade from GIL for one of your exam grades, if desired.

Quizzes: There will be a total of 11 weekly quizzes this semester. The quizzes will be given on Wednesdays (see unit syllabus for exact dates of the quizzes). The problems on the quizzes will be selected directly from your homework assignments from your textbook and GIL workbook; therefore it is a good idea to do the homework. 8 out of 11 quizzes will be counted toward your grade and the lowest 3 quizzes will be dropped at the end of the semester. If you miss a quiz (due to absence or being late to class) you will receive a zero for the quiz. There will be **NO** make-up quizzes, regardless of excuses.

Homework: Reading assignments and homework problems from McMurry will be assigned for each lecture. It is your responsibility to work on these problems - they will not be collected. You should work on the assigned problems on your own, attempting them before looking up the answers! In addition, a review problem set will be handed out for each unit a few days before each exam. Solutions to the problem set will be discussed during review class and the answers will be on my web site.

Attendance: It is extremely important that you attend all the classes. Keeping up with the enormous amount of new material presented in each lecture is the key to success in this course. For example, missing one lecture means you missed half of a chapter. It is much more difficult to keep up if you miss classes. However, if you do miss a class due to illness, it is your responsibility to obtain the notes and handouts that you missed from a classmate.

Study Group: It is highly recommended that you attend study groups that will be offered on a weekly basis. If you receive an academic warning from this class, you will be required to go to a study group. You should bring all your questions (from lecture, from homework problems, from labs etc..) to the study group.

Study Group Time & Place: Mon & Tues 4-7 in Study Area on 4th floor Science Bldg outside of chemistry stockroom.
Mon. & Tues 7-9PM in Residence Campus; Evan's Basement

Office Hours: There will be three hours designated as office hours per week. You are encouraged to come in during these hours to ask any questions (appointments are not necessary during these office hours).

Weekly office hours: Mon. & Wed. 12:30-2:00

If your schedule conflicts with the study groups and office hours, you should make individual appointments by phone or e-mail. If you cannot keep the appointment, please let me know in advance.

Advice: You should plan to spend at least 10-15 hours a week for this class. You will be presented with a lot of new material in each lecture. You should do the reading assignments **BEFORE** each lecture. Pay attention and take good notes during the lectures. After each lecture, try to understand the concepts presented by reviewing your notes and assigned readings. Once you feel that you've mastered the concepts, try the homework problems. Do not just look up the answers without really trying the problems first. If you are not getting the right answers and you can not figure it out by yourself, make a list of questions and bring them to the study group or office hours.

It may be helpful to study in groups so that you can talk to others about homework problems, lectures and labs etc. Students also find taking notes from reading assignments and using 3x5 index cards to be extremely helpful. The key to success in this class is to keep up with the fast pace of the class; cramming right before exams will not work! Since each lecture has homework problems and reading assignments, you should do the work **before** the next class. The next lecture will build on the previous lecture and I will assume that you have understood the material from the previous lecture. Procrastination is the biggest source of failure in organic chemistry!

Grades:	3 Exams (100 pts each)	300 pts
	Final Exam	290 pts
	8 best out of 11 Quizzes (20 pts each)	160 pts
	Laboratory Grade	250 pts

Total	1000 pts
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Spring 2007 Tentative Syllabus and Lecture Outline

<u>Unit #</u>	<u>Topic</u>	<u>Lecture #</u>	<u>Dates</u>
Unit I	<u>Introduction to Organic Chemistry & Chemistry of Alkanes:</u> hybridization, resonance, nomenclature of organic compounds, constitutional Isomers, conformations Exam I: Feb. 12, 2007 (Mon.)	1-10	1/17-2/9
Unit II	<u>Stereochemistry, Acid/Base Chemistry, and Chemistry of Alkenes, Alkynes:</u> chirality, enantiomers, diastereomers, meso compounds. Introduction to reactions: acid/base chemistry Structure, reactivity, reactions and synthesis of alkenes and alkynes Exam II: Mar. 21, 2007 (Wed.)	11-20	2/14-3/19
Unit III	<u>Substitution and Elimination Chemistry:</u> Chemistry of Alkyl Halides and Alcohols. Exam III: Apr. 18, 2007 (Wed.)	21-29	3/23-4/18

Unit IV	<u>Aromatic Chemistry and Free-Radical Chemistry</u> Final- Cumulative	30-36	4/20-5/7
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