

# Organic Chemistry 201

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Spring 2007  
Prerequisites: Chem 150  
with a grade of C (2.0) or better  
or the equivalent

**Textbook:** "Organic Chemistry, 6th Ed.", J. McMurry, Brooks/Cole, 2004

**Study Guide:** "Study Guide and Solutions Manual for Organic Chemistry, 6th Ed.",  
S. McMurry, Brooks/Cole, 2004

**Lecture Notes:** by S. C. Welch in the Bookstore

**Molecular Models:** Prentice Hall Model Set (Any good set will do.)

## Chapter      Title

- 1\* Structure and Bonding (2)
  - 2\* Bonding and Molecular Properties (1)
  - 3 The Nature of Organic Compounds: Alkanes and Cycloalkanes (2)  
**Examination 1** (Ch1-3, 100 points) (1)
  - 4\* Stereochemistry of Alkanes and Cycloalkanes (3)
  - 5 An Overview of Organic Reactions: Free-Radical Substitution (3)  
**Examination 2** (Ch. 1-5, 100 points) (2)
  - 6\* Alkenes: Structure and Reactivity (2)
  - 7\* Alkenes: Reactions and Synthesis: Electrophilic Addition (4)
  - 8 Alkynes: Electrophilic Addition and Nucleophilic Substitution (3)  
**Examination 3** (Ch.1-8, 100 points) (2)
  - 9\* Stereochemistry (3)
  - 10\* Alkyl Halides (2)
  - 11 Reactions of Alkyl Halides: Eliminations and Nucleophilic Substitutions (4)  
**Examination 4** (Ch.1-11, 100 points) (2)
  - 12\* Structure Determination: Mass and Infrared Spectroscopy (3)
  - 13\* Structure Determination: Nuclear Magnetic Resonance Spectroscopy (2)
  - 14\* Conjugated Dienes and Ultraviolet Spectroscopy (1)  
Organic Reactions: A Brief Review (p 645-653)  
**Examination 5** (Ch.1-14, 100 points) (2)
- Final Examination** (Ch. 1-14, 350 points)

**ABSOLUTELY NO MAKE-UP EXAMS, QUIZZES, OR LABS**

# Organic Chemistry 201

## HOW TO STUDY ORGANIC CHEMISTRY IN ORDER TO EARN A GRADE OF A, B, OR C.

1. Take good lecture notes. You are responsible for everything that I write or project on the board except "commercials." Keep a positive can do attitude.
2. Recopy all of your lecture notes in to a large spiral bound notebook within 2 days of the lecture topic. Do this in a quiet place and think about what you are doing. Concentrate on definitions, concepts, pKa's, functional groups, structures, nomenclature, synthetic reactions, stereochemistry, conformational analysis, and reaction mechanisms that are in the lecture notes. **Writing these facts in a spiral notebook is equivalent to reading the material ten times!** Think about it, you're loading the "computer" with the program skills that will allow you to solve problems (homework/exams/quizzes).
3. Use your lecture notes as a guide to your reading in the textbook. Do the reading assignment immediately after copying the lecture notes. This requires self-discipline, responsibility, study skills, and perseverance.
4. Solve the homework problems with the aid of the study guide within 3 days of the lecture topic. **Do the homework problems in the bound spiral notebook. Doing the homework problems is the best practice for the exams/quizzes. This is how you develop the analytical/critical problem solving skills to do well on the exams/quizzes.** Some of these problems will be on the exams/quizzes. You will know when you are ready for the **exams/quizzes** when you can do all the homework problems without the help of the study guide.
5. **Keep up to date.** If you get two weeks behind or you have less than 135 points after the 2<sup>nd</sup> exam you should seriously consider dropping the class because you are not academically prepared to successfully complete this course with a C (2.0) or better. **It is impossible to cram for this course.** (D. Paulsen. "Active Learning and Cooperative Learning in the Organic Chemistry Lecture Class" J CHEM ED,76(8), 1999, pp. 1136-1140.). Cramming only supports short-term memory. **To survive OChem 201-2 you need long-term memory and understanding of information and concepts.**
6. Attendance at all lectures, review sessions and exams is mandatory. Quiz Chapters are indicated with an asterisk (\*). You will need to bring the same **Blue Book** with your name on it to each lecture for the quizzes.
7. The University Writing Requirement is satisfied by the rewriting of the lecture notes, homework problems, examinations, quizzes, and laboratory write-ups.

Students who miss any examination will be given 48 hours to contact me otherwise they will be assigned a grade of zero (F) on that exam.

Exam I – V	500 points
10 Quizzes (*)	150 points
Final	350 points (Fail the Final and you fail the course)
total	1000 "

### **ABSOLUTELY NO MAKE UP EXAMS or QUIZZES**

\* You can earn back lost points by answering questions during lectures.