

# ORGANIC CHEMISTRY

CHE 310  
Fall, 2004

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SC 450  
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**PREREQUISITE: CHE 121 or equiv.**

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Office Hours: *by appointment*. I am on campus usually every weekday. Send me an e-mail, call me, or simply stop by (even when I'm in lab). I can almost always find time to help you.

From previous chemistry courses you should have covered (and developed some mastery of): Lewis Structures; formal charges; covalent bonding; molecular orbitals; multiple bonds; resonance; the relationship between bonding and shapes of molecules and physical/chemical properties; hybrid orbitals; acid-base theory; equilibria; and kinetics. These topics are briefly covered again in the first chapters of organic, and throughout the entire book. If you do not quickly re-acquire a mastery of these topics, you will not do well in this course.

"Learning does not result from passively sitting in the presence of a teacher who's talking. The student must listen, write, question, discuss, imagine, experiment, construct."

Albert Shanker

What you **MUST** do in order to have a chance to do well (C or better) in Organic Chemistry:

1. Study the chapter **BEFORE** it is discussed in class. Coming to class without having studied and understood the previous day's lecture and read 15-25 pages ahead is usually a waste of your time.
2. Recopy your notes - **CRITICALLY!** Recopying your notes without attempting to organize and understand them is almost worthless. Use the left hand side of your notebook to take notes in class and the right hand side for recopying.
3. Do the problems in the book - and **UNDERSTAND** the solutions. Work in small groups and take turns explaining problems to each other. Memorizing (or simply looking at) the answers to problems will not help you.
4. Participate in class. Ask questions! Answer questions! Come to class prepared: See #1 above.

Suggested Organic Problems from Ege, "Organic Chemistry," 5<sup>th</sup> Edition.

- A) You should **understand** all the problems **within** the chapters, with the following exceptions: 3.15, 3.17, 3.18, 3.21, 3.22, 3.26, 4.5, 4.6, 4.11, 4.12, 4.13, 4.14, 4.15, 5.22, 6.4, 6.5, 6.12, 6.21, 6.22, 7.3, 7.4, 7.5, 7.8, 8.4, 8.5, 8.19, 11.2, 11.15, 11.18.
- B) You should **understand** the following problems from the **back** of the chapters:
- |        |                           |
|--------|---------------------------|
| Ch 1:  | 21-27, 30, 31, 34         |
| Ch 2:  | 30, 32-34, 36-38, 40      |
| Ch 3:  | 27-34, 37, 40, 43         |
| Ch 4:  | 19-23, 29                 |
| Ch 5:  | 31-34, 37-39              |
| Ch 6:  | 23-26, 29, 38             |
| Ch 7:  | 27-32, 35, 38, 39, 43     |
| Ch 8:  | 25, 26, 28, 30, 33-36, 43 |
| Ch 9:  | 13-17, 19, 21, 22         |
| Ch 10: | 18-22, 24, 26, 28, 31     |
| Ch 11: | 18-20, 22                 |

