Chemistry 220B Section One Spring 2006

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Class hours: T, TH 9:35-10:50 room SC 4309

Textbook: Organic Chemistry, Sixth Edition J. McMurry,

purchase of the accompaning study guide (Organic Chemistry Study

Guide and Solution Manual) is strongly recommended

Office Hours: T 2-3, TH 3-4, or by appointment.

General Description

Chemistry 220B is built on foundation laid in CHEM 220A. We will study the preparation, basic characteristics, and chemical transformations of several important functional groups. This should give you the basis for the study of polyfunctional compounds in living organisms, research laboratories, or industry.

| Date | Topic | Chapter |
|------------|--------------------------------------|---------|
| Jan 12, 17 | Introduction and Review of Chapter | · 14 |
| Jan 19, 24 | Benzene and Aromaticity | 15 |
| Jan 26, 31 | Electrophilic Aromatic Substitution | 16 |
| Jan 31 | Review session 6:00-7:00 pm in 4327 | |
| Feb 2 | Exam 1 (Thursday) | |
| Feb 7, 9 | Alcohols and Phenols | 17 |
| Feb 14 | Ethers, Epoxides, Thiols, and Sulfid | les 18 |
| Feb 16, 21 | Aldehydes and Ketones | 19 |
| Feb 23 | Carboxylic Acids and Nitriles | 20 |
| Feb 24 | Review session 6:00-7:00 pm in 4309 | |
| Feb 28 | Exam 2 (Tuesday) | |
| Mar 2 | Carboxylic Acid Derivatives | 21 |
| | SPRING BREAK! | |
| Mar 14 | Carboxylic Acid Derivatives (cont) | 21 |
| Mar 16, 21 | Carbonyl α-Substitution Reactions | 22 |
| Mar 21 | Review session 6:00-7:00 pm in 4309 | |
| Mar 23 | Exam 3 (Thursday) | |
| Mar 28, 30 | Carbonyl Condensation Reactions | 23 |
| Apr 4, 6 | Amines | 24 |
| Apr 11, 13 | Carbohydrates | 25 |
| Apr 17 | Review session 6:00-7:00 pm in 4309 | |
| Apr 18 | Exam 4 (Tuesday) | |
| Apr 20 | Amino Acids, Peptides, and Protein | s 26 |
| Apr 25 | Lipids and Nucleic Acids | 27,28 |
| May 4 | Final Exam, Thursday 9:00 am | |

Homework

Textbook problems will be assigned but not graded. Answers will be posted when not available in the Study Guide. Working the problems is essential to learning Organic Chemistry.

Grading

Final grades will be awarded in accordance with the policies delineated in the undergraduate catalog. There will be four "in-class" 50 min exams (100 points each) and one comprehensive final exam (200 points). The final grade will be based on a total of 600 points.

Any questions you may have about an exam grade must be discussed with me within two class days after the test is returned.

Exams

No make up exams nor alternate exam final will be offered because they cannot be mad e of equal difficulty. If an hour exam is missed, the grade will be 0 unless the absence is determined by me to be excused in advance. For those who do not miss an exam and those whose absence is excused: if one half of the final exam grade is better than one of the exams, it will replace the worst exam grade. The course cannot be passed when more than one exam is missed. An excused absence from the final exam can be obtained only from the Dean's office, otherwise a grade M will be given in accordance with University policy.

Getting Help

Get help early if you need it! Falling behind in organic chemistry is no fun and can impede your future progress in the course because the material builds on itself. Special help sessions are scheduled before each exam, and a couple of practice exams will be available for study purposes. Remember, there is more material to study than last semester.

I encourage you to see me during my office hours to get help with questions and problems. Other sources of help include your lab instructor, lab TA, other organic texts, and your fellow students.

Honor Code

All aspects of the Vanderbilt honor code apply to this course. You must legibly write and sign the Vanderbilt Honor Pledge on every exam. Students are encouraged to work togethe r on problems and to study in groups. Exams, however, must be taken on an individual basis with no external aids other than those specifically permitted in advance by the instructor.