Instructor

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Office Hours: MWF 9:00-10:00 AM

Course Description

CHEM 210, the first part of a two-semester organic chemistry sequence, is required for scientists to understand the electronic structure and reactivity of simple and complex molecules. Organic chemistry is built on a few and relatively simple concepts that allow a large but highly interconnected discipline to be easily understood. Successful students will not only understand and be able to apply organic chemistry, but they will have developed the capabilities and skills to solve other difficult problems in their own careers. Concepts taught in CHEM 210 include bonding, molecular orbital theory, valence bond theory, hybridization, Lewis acids and bases, isomerism, functional groups, organic reaction mechanisms, electrophiles, nucleophiles, electrophilic addition reactions, nucleophilic substitutions, elimination reactions and stereochemistry.

Academic Integrity Policy

Penn State and your professor put a very high value on academic integrity, and violations are not tolerated. More information on academic integrity can be found at:

http://www.pserie.psu.edu/faculty/academics/integrity.htm

The Solutions Manual is strongly recommended.

Recommended Materials: Use of a molecular model set is strongly encouraged. One will be used to demonstrate concepts throughout the semester.

Course Website: Available on the CHEM 212 page of the instructors website: http://chemistry.bu.psu.edu/justk/CHEM212.html

All problem sets and study guides will be posted here, as well as answer keys for the exams.

It is assumed that you check your PSU e-mail daily for course announcements.

Exams
Exams: 4 x 100 pts = 400 pts
Final: 1 x 150 pts = 150 pts
500 pts

The final exam given during the time assigned by the registrar and is cumulative and comprehensive.

Exam dates and covered material are subject to change

Course Schedule

<table>
<thead>
<tr>
<th>Chapter</th>
<th>The Basics</th>
<th>Families of Carbon Compounds/IR</th>
<th>Acids and Bases</th>
<th>Nomenclature and Conformations of Alkanes</th>
<th>Stereochemistry</th>
<th>Ionic Reactions</th>
<th>Alkenes and Alkynes I</th>
<th>Radical Reactions</th>
<th>Alcohols and Ethers</th>
<th>Final Exam</th>
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Course Policies

- It is assumed that you read each chapter before we cover the material and perform the minimum problem sets immediately thereafter

- Study guides will be posted one week before each exam. These will also include a list of possible mechanisms and synthetic targets

- After the comprehensive lecture in Chapter 4, nomenclature is primarily your responsibility.

- A study workshop will be given to review the material for each exam.

- During exams you are allowed two writing utensils only. All book bags and electronic devices must be left at the front or rear of the room. Brimmed hats must be removed.

- You have one week from the in-class turn-back of any exam to bring errors in grading or tabulation to my attention.

- Cell phone use and texting are prohibited in class.

Grade Scale

The following grading scale will be used. If the class average falls below a C+ mark, an adjustment may be made for grade cutoffs. The 55% grade for passing is firm:

A 90-100
A- 80-89
B+ 77-79
B 73-76
B- 70-72
C+ 67-69
C 60-66
D 55-59
F 0-54
Tips for Success

Organic chemistry is perceived as one of the most difficult courses taken during an undergraduate degree program, but there are ways to increase your performance and maybe even enjoyment of the course:

• If you are not writing, you are NOT studying.

• Organic chemistry is more a foreign language than anything else. It must be practiced every day—writing, reviewing and working problems!

• Do not miss any material or “relax” your study habits—this is a fifteen-week marathon and every effort is required!

• Study groups are helpful and encouraged—cram sessions are typically not helpful and discouraged!

• After each lecture—rewrite your notes. You will be surprised how well this simple tool works, at least to make sure your notes are legible and organized should you decide to cram!

• Do not emphasize memorization—this is a course of concepts and applications! Most wrong answers on exams are convoluted material that was memorized.

• Students often complain they study and study and never assimilate the material—remember, if you study the same way each time, you will get the same result of success or failure!

See Dr. Justik if you have any problems—that is why he is here!