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# CHEM 244-HM2: Organic Chemistry II Honors

Yuanwei Zhang

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## CHM 244-002 & HM2, Organic Chemistry II - Spring 2020

Instructor: Yuanwei Zhang, Ph.D.

Lecture: CULM LECT 1; Monday and Thursday 2:30 – 3:50 pm

Office: Tiernan 353 Email: Yuanwei.zhang@njit.edu

Office Hours: Monday: 10:00 –12:00. And by appointment.

Textbook: Organic Chemistry by L. G. Wade.

The textbook is packaged with a study guide, molecular modeling software & workbook.

An inexpensive set of molecular models is highly recommended and models cannot be used during exams.

**Course Content:** Tentative material to be covered.

Chapter 12, Infrared Spectroscopy and Mass Spectrometry.

Chapter 13, Nuclear Magnetic Resonance Spectroscopy.

Chapter 14, Ethers, Epoxides and Thioethers.

Chapter 15, Conjugated Systems, Orbital Symmetry and UltraViolet Spectroscopy

Exam 1: February 27, 2020

Chapter 16, Aromatic Compounds.

Chapter 17, Reactions of Aromatic Compounds.

Chapter 18, Ketones and Aldehydes.

Chapter 19, Amines.

Exam 2: April 09, 2020

Chapter 20, Carboxylic Acids.

Chapter 21, Carboxylic Acid Derivatives.

Chapter 22, Condensations and Alpha-Substitution of Carbonyl Compounds.

Final Exam: TBA

Material from Chem 243-Organic Chemistry I will have to be understood and integrated with the material in this course. The final exam will be partially cumulative with an emphasis on the understanding of

fundamental concepts applied to a variety of systems. Specific questions on the chapters covered after Exam 2 will be emphasized.

**Exams and quizzes**: Before each Exam there will be a Quiz, which covers three to four chapters. Take the Quizzes seriously, as they add up to one Exam grade. Problems in the body of the chapter are assigned and selected problems at the end of the chapter. These will not be collected. You have answers to these problems. To do well in the course it is important to do these problems. You must bring a photo ID to the exam and take the exam in the room assigned to you by the course coordinator. Failure to take the exam in the assigned room will result in a loss of a full grade from your exam score.

**Grading**: The grade will be determined from a total of 300 points. 100 points will be dropped from the total midterm of 300 points, either the quizzes (100 points) or the lower of the two exams (The final exam cannot be dropped). Makeup exams are not encouraged. If you must miss an exam contact the coordinator before the exam or immediately after. Makeup should be taken within the first week of the exam and before exams are given back. You must have a valid excuse and a doctor note.

Two Exams (100 pts each)	200 pts
Quizzes	100 pts
-The lowest grade	-100 pts
Final Exam	100 pts
<b>Total Possible Exam Points</b>	300 pts

### **Grading Scale:**

A (90-100%), B+ (85-89.9%), B (80-84.9%), C+ (75-79.9%), C (70-74.9%), D (60-69.9%), F (below 60%)

**Academic misconduct**: The NJIT Honor Code will be upheld. Any student that participates in any form of academic dishonesty or cheating will receive a zero for the exam. If a person is caught a second time, a final grade of "F" will be given for the course. Any violations will be brought to the immediate attention of the Dean of Students, who may impose further penalties.

**How to succeed in this class**: To succeed it is important to study consistently and effectively.

- Before the class, read the suggested chapter. This pre-exercise will make lecture easier to follow.
- Attend class faithfully.
- After lecture, go over your notes and fill in parts that do not fully understand using material from the textbook that applies to the topic covered in lecture.
- Highlighting sentences with marker is not the most effective way to transfer knowledge to the brain. Instead, putting concepts into your own words and writing them down results in your assimilating the concepts and recognizing relationship among concepts.