

CHEMISTRY 124
Organic Chemistry II – Fall 2008
T Th 7:30 – 8:45 SQU 456

Instructor Dr. John D. Spence

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Office Hours M 3:00-4:00, W 3:00-4:00, Th 2:00-3:00

Text John McMurry, "Organic Chemistry" Seventh Edition (required)

Grading Your grade for the course will be based on in class quizzes, exams and the course final. Nine in class quizzes will be administered on the days posted in the tentative course schedule and your six highest quiz scores will count towards your grade (15 pts each). Each of the three mid-term exams are worth 125 points. The final exam administered is a standardized, cumulative exam (covering chem 24 and 124) written by the American Chemical Society and is worth 200 points. All exam and quiz dates are listed in the tentative course schedule. Students caught cheating on any assignment will receive a score of zero for that assignment. If a student is caught cheating a second time they will fail the course.

Point Distribution

Class Quizzes:	90 points
Exams:	375 points
<u>Final Exam:</u>	<u>200 points</u>
Total:	665 points

Grade Scale

A to A ⁻	100-88 %
B ⁺ to B ⁻	87-75 %
C ⁺ to C ⁻	74-62%
D ⁺ to D ⁻	61-50%
F	below 49%

Make-ups No late or make-up quizzes or exams will be given. If you miss an in-class quiz it will automatically become one of the three quiz scores you drop. If you miss an exam without a valid excuse you will receive a score of zero. **One** missed exam with a **valid excuse** (instructors' discretion) can be made up using the appropriate section of the final exam if the instructor is notified **in advance**. You must notify the instructor before the regularly scheduled exam to determine if it can be made up during the course final.

Homework At the end of lectures relevant homework problems will be assigned from the text to test your understanding of the material presented. In addition, I will distribute homework sets in class to provide you with additional practice and to get used to my style of writing questions similar to what you will see on exams. No homework will be collected or graded, however, I am willing to check/discuss your answers in office hours. Correct answers from the text are available in the solutions manual while answers to problem sets will be posted a few days before exam dates.

Course Description

The course is a continuation of organic chemistry and will build on your knowledge of spectroscopy, reactivity of organic molecules, reaction mechanisms, and the syntheses of organic compounds. It will be expected that you have a strong grasp of the material covered in the first semester of the organic sequence, therefore, it is to your advantage to review some of these key concepts: Lewis structures, resonance, hybridization, pKa's, electrophilic and nucleophilic sites, using curved arrows to depict reaction mechanisms, performing multistep syntheses, IR spectroscopy.

Tentative Course Schedule

<i>Week</i>	<i>Assignment</i>	<i>Topics</i>	<i>Text</i>
9-2		Course Intro. IR and NMR Spectroscopy ¹ H NMR Spectroscopy	Ch 12, 13 Ch 13
9-9	Q1	¹ H and ¹³ C NMR Spectroscopy Conjugated dienes, Diels-Alder	Ch 13 Ch 14
9-16	Q2	Uv-vis spectroscopy, Aromaticity Aromaticity	Ch 14, 15 Ch 15
9-23	Q3	Aromaticity and Aromatic Reactivity Aromatic Reactivity	Ch 15, 16 Ch 16
9-30		Aromatic Reactivity Alcohols	Ch 16 Ch 17
10-7	Exam 1	Exam 1: Tuesday Oct 7th. Chapters 13, 14, 15, 16 Alcohols	Exam 1 Ch 17
10-14	Q4	Ethers and Epoxides Ald and Ket	Ch 18 Ch 19
10-21	Q5	Ald and Ket Ald and Ket	Ch 19 Ch 19
10-28	Q6	Carboxylic Acids Carboxylic Acids and Nitriles	Ch 20 Ch 20
11-4	Exam 2	Acid Derivatives Exam 2: Thursday Nov 6th. Chapters 17, 18, 19, 20	Ch 21 Exam 2
11-11		<i>No Class – Veterans Day</i> Acid Derivatives	Ch 21
11-18	Q7	Acid Derivatives and α -Sub α -Sub	Ch 21, 22 Ch 22
11-25	Q8	α -Sub and Carbonyl Condensations <i>No Class - Thanksgiving Holiday</i>	Ch 22, 23
12-2	Q9	Carbonyl Condensations Carbonyl Condensations	Ch 23 Ch 23
12-9	Exam 3	Exam 3: Tuesday Dec 9th. Chapters 21, 22, 23 Course Review	Exam 3
***		FINAL EXAM Thursday Dec 18th 8:00 – 10:00 a.m.	***