

Chem 6400 - Mechanistic Organic Chemistry

Fall Semester 2014

425 Classroom South

2:30-3:45 p.m. Tuesday and Thursday

Required Textbook

Advanced Organic Chemistry, 5th Edition, Part A; Carey and Sundberg

Instructor:

Dr. Alfons L. Baumstark

386 PSC, office hours by appointment

Phone: 404-0413-5516

Email: abaumstark@gsu.edu

Dr. Jun Yin

NSC 571, office hours by appointment

Phone: 404-413-6090

Email: junyin@gsu.edu

Grade Assignment

	<u>Tentative</u>	<u>Tentative Cutoffs</u>
Midterm (E)	23% / 125 pts.	A+ = 95%
ACS Exam (Background)	14% / 75 pts.	A = 90%
Problem sets, quizzes, etc.	18% / 100 pts.	A- = 88%
Formal Final Paper & Presentation	<u>23% / 125 pts.</u>	B+ = 84%
	425 max.	B = 80%
		B- = 76%
		C+ = 71%
		C = 68%
		C- = 63%

Note:

1. Chapter 1 will not be covered in lecturer; Read Chapter 2 before the first lecture.
2. NO make-up exams or quizzes will be given; late homework assignments can result in loss of credit. All exams except ACS are open book.
3. Attached Department of Chemistry statement on student integrity also applies to homework for this course.
4. Last day to drop with a W is October 14, 2013.
5. Expectations and Presentation Evaluation will be appropriate for background of the individual student.

Chemistry Department Student Conduct and Integrity Policy

- All tests taken and homework must represent your individual, unaided efforts.
- To receive or offer information during an examination or on homework assignments is cheating.
- The use of supplementary materials during tests or on homework assignments is allowed but must be referenced.
- Use of graded materials from previous terms is not allowed. Students are not allowed to contact faculty or students at other institutions for help.
- Conduct or actions that disrupt class or test periods or falsification of information related to chemistry courses by any student will be taken as violation of the policies of the Board of Regents of the University System of Georgia and the GSU Student Code of Conduct, Section 6.0.
- Any suspected offenses may be referred to the Department Chair or the Dean of Students for appropriate disciplinary action.

Lecture Schedule of Chem 6400 – Mechanistic Organic Chemistry

Textbook: Advanced Organic Chemistry, Part A: Structure and Mechanisms. 5th Edition (2007)

Week	Date	Instructor	Topic	Carey and Sundberg Chapter
1	August 26	Baumstark	Stereochemistry	2
		Baumstark	Stereochemistry	2
2	September 2	Yin	Conformation	2
		Yin	Stereoelectronic effects	2
3	9	Baumstark	Kinetics	3
		Baumstark	Linear free energy relationships	3
4	16	Baumstark	Isotope effects	3
		Yin	Nucleophilic substitution S _N 2	4
5	23	Yin	S _N 1, carboncation	4
		Baumstark	Nonclassical carbocations, Neighboring group effects	4
6	30	Baumstark	Addition and elimination reactions	5
	October 2		ACS exam	
7	7		Take home exam	
			Exam grading, no class	
8	14	Yin	Carbanion , acidity	6
		Yin	Carbonyl group	7
9	21	Yin	Aromaticity	8
		Yin	Aromatic substitution	9
10	28	Baumstark	Pericyclic reactions	10
		Baumstark	Pericyclic reactions	10
11	November 4	Yin	Free radical reactions	11
		Baumstark	Photochemistry	12
12	11		Student presentation	
			Student presentation	
13	18		Student presentation	
14	25		<i>Thanksgiving break, no class</i>	
			<i>Thanksgiving break, no class</i>	
15	December 2		Student presentation	
			Student presentation	
16	December 9		Final paper due	