George Mason University
Department of Chemistry and Biochemistry
Synthetic and Mechanistic Organic Chemistry, (Chemistry 413-001)
Spring 2013
Instructor: Dr. Ramesh R. Pant
Email: rpant2@gmu.edu
Office: S & T I Room-329

Meeting Time:
Meeting Place:
Office Hrs: By appointment

Required Text: **Organic Chemistry: An Intermediate Text, 2nd Edition** by Robert V. Hoffman
(ISBN: 978-0-471-45024-5)

Date	Chapter in text	Subjects
Week 1	1	Introduction, Functional groups and chemical bonding.
Week 2	2, 3	Oxidation States of Organic Compounds Acidity and Basicity
Week 3	4, Handout	Curved arrow notation and reaction mechanism
Week 4	7	Functional group synthesis
Week 5	Handout	Aromatic compounds and their reactivity
Week 6	**1st Midterm**	
Week 7	6	Stereochemistry of organic compounds
Week 8	No classes (Spring Break)	
Week 9	8, Handout	Synthetic strategy involving carbon nucleophile and carbon electrophiles
Week 10	9	Free radical reactions
Week 11	**2nd Midterm**	
Week 12	10	Planning Organic synthesis

Week 13	10	Planning Organic synthesis
		Library project and presentation slide due
Week 14		Library Project
Week 15		Library Project
Week 16		Final (Comprehensive)

Examination Policies: All examinations are closed book, and the use of notes, tables or other written or printed material is not allowed. The use of molecular model and pocket calculators is permitted. Be sure that you are familiar with GMU honor code.

After each examination is graded, the average grade on it will be announced so that you can estimate your standing in the class. Letter grades are given only at the end of the semester, but you can tentatively assume that your grade corresponds to a B if it is within 10 points of the class average.

Homework Policies: You are expected to try all of the problems that apply to material discussed in the class, in and at the end of the chapter studied. Some of the problems are likely to appear in the exam. For Hoffman's book, the lists of assigned problems will be distributed in the class.

Library Project: You will be assigned some problems for searching the literature in the library. You will be assigned a specific library project after first midterm.

Grading:	2 Midterms (100 each)	200
	Assignments	100
	Library Project	50
	Final Exam	150

Final course grading will depend on your standing in the class.

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