

Advanced Organic Chemistry

CHEM-530

TERM 072

Instructor: Dr. Hasan Al-Muallem

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Classes: 5:00-6:15 PM Sunday and Tuesday,

Classroom: 4-238

Office Hours: Sunday & Tuesday (1:00-3:00 PM) and Monday (10:00-12:00), and by appointment.

Textbook: *Advanced Organic Chemistry Part A: Structure and Mechanism* by F. A. Carey & R. J. Sundberg, 4th Edition, 2000.

Examinations and Assignments: There will be 2 major exams during the semester and a final exam at the end of the semester. Homework and quiz assignments will be given periodically throughout the semester.

1 st Major Exam	(25%)	(Chapters 1, 2, & 3)	March 18 th , 2008
2 nd Major Exam	(25%)	(Chapters 4, 5, & 6)	April 27 th , 2008
Final Exam	(40%)	(Chapters 7-11 & 13.2)	Thursday June 5 th , 2008 at 7:00 PM
Class Work	(10%)		

Preliminary Course Outline

Lec.	Day	Date	Chapter # (Reading Assignment)	Homework Assignments
1	Su	Feb. 17		
2	Tu	Feb. 19	1: Chemical Bonding and Structure	2, 3, 4, 5, 11, 21
3	Su	Feb. 24		
4	Tu	Feb. 26		
5	Su	Mar. 02	2: Principles of Stereochemistry	1, 3, 4, 5, 11, 13, 15
6	Tu	Mar. 04	3: Conformational, Steric and Stereoelectronic Effects	4, 6(b,c,d), 7(a,c,g), 8(a,b,c,f), 14, 21
7	Su	Mar. 09		
8	Tu	Mar. 11		
9	Su	Mar. 16	4: Study and Description of Organic Reaction Mechanism	5, 7, 9, 14
10	Tu	Mar. 18		
11	Su	Mar. 23		
12	Tu	Mar. 25	5: Nucleophilic Substitution	1(a,e) 2, 3(a,c,f,k), 11(a-c), 11, 17(a,b,d)
13	Su	Mar. 30		
14	Tu	Apr. 01		
15	Su	Apr. 06	6: Polar addition and Elimination Reactions	1(a-d), 2(a-e), 3
16	Tu	Apr. 08		
17	Su	Apr. 20		
18	Tu	Apr. 22	7: Carbanions and Other Nucleophilic Carbon Species	1(a-d), 2, 9
19	Su	Apr. 27		
20	Tu	Apr. 29		
21	Su	May 04	8: Reactions of Carbonyl Compounds	1, 3, 5(a,c,f), 11, 24
22	Tu	May 06		
23	Su	May 11	9: Aromaticity	2, 7, 9
24	Tu	May 13		
25	Su	May 18	10: Aromatic Substitution	7, 8
26	Tu	May 20		
27	Su	May 25		
28	Tu	May 27	11 & 13.2: Concerted Pericyclic Reactions	2, 5(b-g), 7, 12, 19 (a-g)
29	Su	Jun. 01		
30	Tu	Jun. 03		