

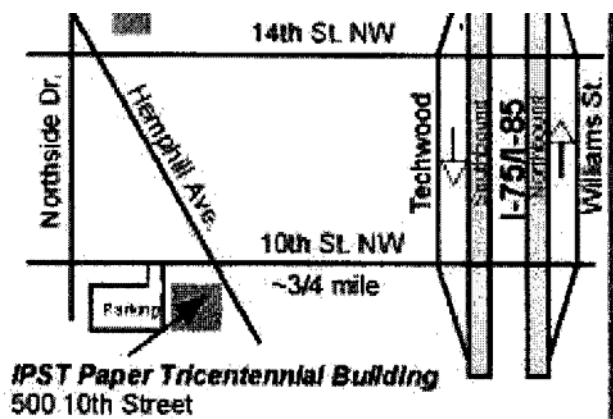
ORGANIC CHEMISTRY – II

Monday, Wednesday and Friday (Boggs, B6)
11:00 – 12:00 am or 1:00 – 2:00 pm
Problem Solving Sessions (TBA)

INSTRUCTOR

Art. J. Ragauskas (AJR)
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REQUIRED TEXTBOOKS

"Organic Chemistry", 8th edition, by T.W. Graham Solomons and Craig B. Fryhle and "Study Guide and Solutions Manual to Accompany Organic Chemistry". *These available at the Georgia Tech bookstore as a bundle at considerable savings over separate purchase from other retailers.*

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REQUIRED SOFTWARE

You must have access to CambridgeSoft's *ChemOffice* software package consisting of *ChemDraw* and *Chem3D*. This is available from the Georgia Tech Bookstore

MODEL KITS

Many students find model kits useful when studying organic chemistry. You do not need an expensive kit. A small selection of atoms and bonds is useful. Model kits could certainly be shared.

RECOMMENDED REFERENCE TEXT

The final exam for this course is the American Chemical Society (ACS) standardized exam in organic chemistry. The exam covers the entire year of introductory organic chemistry. A valuable study guide for the final is the ACS "Organic Chemistry Official Study Guide" please see <http://www.uwm.edu/Dept/chemexams/> for instructions as to how this can be purchased.

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Date	Lecture	Topic, reading assignment	Lecturer
Topic 1: Conjugated Systems and Aromaticity (13,14, part of 15)			
09-Jan M	1	Intro and Review of ChAJRters 1-11	AJR
11-Jan W	2	13.1-3 and 15.12	AJR
13-Jan F	3	13.4-5 and 15.13A-B,15	AJR
<u>16-Jan M</u>		<u>MLK Day - no class</u>	
18-Jan W	4	HW1 13.6-10	AJR
20-Jan F	5	13.11 and 14.1-3,10	AJR
23-Jan M	6	HW2 14.4-9,11 and 15.16	AJR
25-Jan W	7	Review of Topic 1	AJR
27-Jan F		EXAM 1	AJR
Topic 2: Reactions of Arenes (15, 21, part of 20)			
30-Jan M	8	15.1-5	AJR
01-Feb W	9	15.6-9	AJR
03-Feb F	10	HW3 15.10,11,13C	AJR
06-Feb M	11	15.14 and 20.5B,7B,7D,8-9	AJR
08-Feb W	12	HW4 21.1-9	AJR
10-Feb F	13	21.11	AJR
13-Feb M	14	Review of Topic 2	AJR
15-Feb W		EXAM 2	AJR
Topic 3: Synthesis, Addition, and Addition-Elimination			
Reactions of Aldehydes and Ketones (12,16)			
17-Feb F	15	12.1-2,4 and 16.1-4	AJR
20-Feb M	16	16.5-6,12-13	AJR
22-Feb W	17	HW5 12.3 and 16.7	AJR
24-Feb F	18	12.5-8 and 16.8-9	AJR
27-Feb M	19	12.8A,9,10 and 16.11	AJR
01-Mar W	20	HW6 16.10,14 and Review	AJR
03-Mar F		Review of Topic 3	AJR
06-Mar M		EXAM 3	AJR
Topic 4: Addition-Elimination at Acyl Carbon (18)			
08-Mar W	21	18.1-4	AJR
10-Mar F	22	18.5-8F	AJR
13-Mar M	23	HW7 18.8G-10	AJR
Topic 5: Amines (20)			
15-Mar W	24	20.1-20.4	AJR
17-Mar F	25	20.5	AJR
<u>20-Mar M</u>		<u>Spring Break</u>	
<u>22-Mar W</u>		<u>Spring Break</u>	
<u>24-Mar F</u>		<u>Spring Break</u>	

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27-Mar M	26	HW8	20.6,12-13	AJR
29-Mar W			Review of Topics 4 & 5	AJR
31-Mar F			EXAM 4	AJR
Topic 6: Enols and Enolates (17,19)				
03-AJRr M	27		17.1-3	AJR
05-AJRr W	28		17.4-5	AJR
07-AJRr F	29		17.6-9	AJR
10-AJRr M	30	HW9	19.1-2	AJR
12-AJRr W	31		19.3-4	AJR
14-AJRr F	32		19.5,6,8,9,11	AJR
17-AJRr M	33	HW10	Review of Topic 6	AJR
19-AJRr W	34		Review of Topic 6	AJR
21-AJRr F			EXAM 5	AJR
24-AJRr M	35		<i>Review</i>	AJR
26-AJRr W	36		<i>Review</i>	AJR
28-AJRr F	37		<i>Review</i>	AJR

POLICIES, PROCEDURES AND GRADES

GRADES

Exam 1	Jan 27	Topic 1	100 points
Exam 2	Feb 15	Topic 2	100 points
Exam 3	Mar 6	Topic 3	100 points
Exam 4	Mar 31	Topic 4 and 5	100 points
Exam 5	AJRr 21	Topic 6	100 points
Final	Finals week	Comprehensive (multiple choice)	200 points
Homework			100 points

The lowest score from the mid-term exams, or the Homework will be dropped. The course will be graded on the basis of 700 points:

85% (595 points) will guarantee an "A"

70% (490) guarantees a "B"

60% (420) guarantees a "C"

50% (350) guarantees a "D"

CLASS NOTES

Notes for each topic should be downloaded from the web (as PDF files) and printed prior to the first lecture dealing with the material. Topics correspond fairly closely to the chapters, with a little reorganization. *These notes are not designed to be comprehensive.* In fact, they are specifically designed to be incomplete. They are designed to serve as the basis for lecture notes, not as a replacement for attending lectures. The notes should minimize the use of lecture time for information transfer, and allow time to work problems in class.