Chemistry 239 – Organic Chemistry II Sam Houston State University

Summer II 2008 Dr. Donovan C. Haines

Course Information

Section 02: MoTuWeThFr 10:00 am - 11:50 am

Meet in CFS 121

Instructor Information

Dr. Donovan C. Haines

Office: CFS 317F Phone: To Be Announced Email: haines@shsu.edu

Office hours (tentative – listen in class for any changes):

MoWeFr 8:30 am - 9:30 am TuTh 4:00 pm - 5:00 pm

Required Materials

Textbook (required): John McMurry, "Organic Chemistry", 7th edition, Thomson, Brooks/Cole, 2008, ISBN 0-495-11258-7.

SHSU Catalog Descriptions and Prerequisites

- CHM 238 Organic Chemistry I: Lecture. [CHEM 2323] A study of chemical bonding and structure of organic molecules is made. Functional group reactions and syntheses are emphasized. Reaction mechanisms, nomenclature and isomerism are studied. Prerequisite: A minimum grade of C in CHM 138/118, 139/119. Fall, Spring, Summer I. Credit 3.
- **CHM 239 Organic Chemistry II: Lecture.** [CHEM 2325] The general plan of CHM 238 is continued. Fall, Spring, Summer II. Prerequisite: A minimum grade of C in CHM 238. Credit 3.
- **CHM 218 Organic Chemistry I: Laboratory.** [CHEM 2123] Laboratory for CHM 238. Prerequisite: A minimum grade of C in CHM 119, and prior credit for or concurrent enrollment in CHM 238. Credit 1.
- **CHM 219 Organic Chemistry II: Laboratory.** [CHEM 2125] Laboratory for CHM 239. Prerequisite: A minimum grade of C in CHM 218, and prior credit for or concurrent enrollment in CHM 239. Credit 1.

Schedule

This schedule is subject to change. You should read the chapter to be covered BEFORE coming to class.

Dates	Chapter (McMurry)	Topic	Quiz
July 8	Intro/12	Introduction, Spectroscopy Review 1 (MS & IR)	
July 9	13	Spectroscopy Review 2 (NMR)	1
July 10	14	Conjugation and UV-vis	2
July 11	15	Benzene and Aromaticity	3
July 14	11 & 7 (Review)	Review of Organic I reactions	4
July 15		EXAM #1	
July 16	16	Reactions of Aromatic Systems	
July 17	17	Alcohols	5
July 18	18	Ethers, Epoxides, Thiols, Sulfides	6
July 21	Preview before	Intro to Carbonyl Chemistry	7
T 1 22	19	TIT 1 3 F 1/0	
July 22	1.0	EXAM #2	
July 23	19	Aldehydes and Ketones	
July 24	20	Carboxylic Acids and Nitriles	8
July 28	21	Carboxylic Acid Derivatives	9
July 29	22	Carbonyl Alpha-Carbon Chemistry	10
July 30	23	Carbonyl Condensation Reactions	
July 31	23	(cont. and carbonyl review)	11
Aug 4		EXAM #3	
Aug 5	24	Amines and Heterocycles	
Aug 6	24 & Review	Finish amines and review for final exam	
Aug 7		FINAL EXAM	

Note on Learning Strategies:

Many students start out trying to memorize all the reactions in this course. Memorization is a necessary part of studying organic chemistry, and most students find flash cards helpful in this regard. A common mistake, however, is thinking memorization is the major way you should study. You will be presented with far too many reactions to memorize, but they will all occur through only a few common mechanisms. Learn those mechanisms and the fundamentals of what causes something to be reactive and you will do much better. Understanding mechanism is the key managing this course. Remember, *Organic Chemistry is the behavioral psychology of electrons*. Learn what the electrons want to do and why and you have it made.

Your major goal should be to learn to predict what chemistry can happen even for reactions that you have not seen before. That comes from an understanding of chemistry.

Grading

Quizzes (Best 10 of 11)	10 points each	100 pts
Exams (Best 2 of 3)	125 points each	250 pts
FINAL Exam	150 points	150 pts
TOTAL:		500 pts

Grading Scale:

Your total points for the semester will be rounded to the nearest whole point and your grade will be determined as follows:

450 and above	A
400 to 459	В
350 to 399	C
300 to 349	D
Below 300	F

<u>Quizzes</u>. For each quiz the instructor will, without prior announcement in most cases, require that it be taken in class, as a take-home assignment, or online on Blackboard. Missed quizzes carry a grade of 0, there are no makeup quizzes. Quizzes will focus on material covered in the lecture or two prior to the quiz, but may cover any material discusses up to that point in the semester.

<u>Exams.</u> Exams will be taken during normal class time. There are no makeup exams, if you miss an exam it will count as your dropped lowest grade in the grading scheme above. All exams are inherently comprehensive, but focus on the material covered since the previous exam.

You should be working the problems in the text daily. Both quizzes and exams may include questions from the text from time to time.

University Wide Policies

Additional details can be found at http://www.shsu.edu/syllabus/.

ACADEMIC DISHONESTY:

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. For a complete listing of the university policy, see:

http://www.shsu.edu/administrative/faculty/sectionb.html#dishonesty

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20...." A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed. For a complete listing of the university policy, see:

http://www.shsu.edu/~vaf_www/aps/documents/861001.pdf

STUDENTS WITH DISABILITIES POLICY:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance are expected to visit with the Office of Services for Students with Disabilities located in the Counseling Center . They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Counseling Center and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Counseling Center . For a complete listing of the university policy, see:

http://www.shsu.edu/~vaf_www/aps/811006.pdf

VISITORS IN THE CLASSROOM:

Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office.