

Loyola University Chicago

Syllabus

Organic Chemistry A CHM 223 Sec. 009

Fall 2008

Lecture: M, W 06:15 PM - 08:00 PM Flanner Hall 133

Instructor: Donald May Contact: dmay4@luc.edu

Office: Flanner Hall 403 Hours: M, R 05:00 PM – 06:00 PM

Required Materials:

Textbook: Organic Chemistry, Wade, L.G., Jr., 6th ed., Prentice Hall, 2006.
ISBN 0-13-147871-0

Optional: 1) Study Guide and Solutions Manual, Wade & Simek, 6th ed. ISBN 0-13-147882-6
2) Molecular Model kit
3) Pushing Electrons: A Guide for Students of Organic Chemistry, D. Weeks

Method of instruction: Lecture and discussion.

Grading: Semester grades will be determined by the following criteria: 3 In-Class Exams (~100 pts.) and a final exam (~150 pts.). See attached schedule. No early and no make-up in-class exams. For a single missed in-class exam the final exam will be utilized to determine a larger percentage of the course grade. Any subsequent missed in-class exams will be scored as zero. The student must have a valid and verifiable reason for missing the final exam, such as an extreme emergency, serious illness requiring hospitalization and so forth. Oversleeping, not knowing the date and time of the final exam or not being prepared and so forth, are not valid reasons. If a verifiable and valid reason cannot be provided a zero score for the final exam will be recorded.

Final course grade: Grading will be based on a curve: The mean, standard deviation and quartiles will be given and utilized for assigning grades.
Grades assigned will be: A, A-, B+, B, B-, C+, C, C-, D+, D, F

Student Conduct: At all times students are expected to conduct themselves in a mature and professional manner, which includes but is not limited to: treating everyone in class with respect, avoidance of extraneous comments and small group discussions during lecture. Eating and drinking (food items) are not allowed. Additionally radios, headphones, cell-phones or similar devices must be in silent mode and are not permitted during lectures and exams. Disruptive students will be asked to leave. If a cell phone rings (beeps, buzz, etc.) during any exam, the exam will be collected and the student will not be allowed to continue. Suggested textbook homework problems will be given but the student will not be required to turn them in. Exam questions, however, will come predominantly from lecture notes and from concepts related to suggested homework problems. It is recommended that the student read through each chapter before lecture and eventually work through the suggested problems.

Academic Integrity: Consult the Undergraduate Studies Handbook for additional information. All exams are closed book and closed note. During exams violations include but are not limited to: cell phone ringing, opening a book-bag or back-pack during an exam, using unauthorized notes or books, looking at another student's exam, talking to another student, taking a copy of the exam from the room and so forth. Students caught cheating will receive a zero for the exam. Further actions may also result. If a student begins an exam it must be turned in for grading. Students must bring their Loyola I.D. for each exam. Students are not allowed to leave the room during exams until their exam is handed in for grading. If you leave, you must turn in your exam and you will be considered finished. Please keep noises and sounds to a minimum. When leaving, be respectful and leave quietly.

Lecture Outline (tentative, subject to change)

Week	Date	Chapter	Topic	*
1	08/25 08/27	1 2	Lewis structures, bonding, resonance, formal charges, Acid-Base MO theory, hybridization, model, bond rotation	
2	09/01 09/03		NO CLASS Labor Day- Holiday functional groups	
3	09/08 09/10	3	Alkanes, nomenclature, conformational analysis Cycloalkanes, stereochemistry	
4	09/15 09/17	4	Free radicals, bond dissociation energy	
5	09/22 09/24	5	EXAM I Chapters 1-4 Stereochemistry, enantiomers, diastereomers, optical activity, chirality	
6	09/29 10/01	6	Alkyl halides, nomenclature, properties, reaction rates and mechanisms SN1, SN2 comparison E1, E2	
7	10/06 10/08	7	NO CLASS Midterm Break Alkenes nomenclature, degrees of unsaturation, preparation	
8	10/13 10/15	8	Alkene reactions, bromination, hydration, hydroxylation,	
9	10/20 10/22	9	EXAM II Chapters 5-8 Alkynes, nomenclature, reactions synthesis	
10	10/27 10/29	10	Alcohols, classification, nomenclature, properties, synthesis	
11	10/31 11/03 11/05	11	Last day to withdraw with a "W" otherwise "WF" Reactions of Alcohols	
12	11/10 11/12	12	IR Spectroscopy, Mass Spectrometry	
13	11/17 11/19	13	EXAM III Chapters 9-12 NMR, chemical shifts, splitting patterns, spectra interpretation	
14	11/24 11/26		NO CLASS Thanksgiving Break	
15	12/01 12/03	14	Ethers, nomenclature, synthesis	
16	12/08		FINAL EXAM 07:00 PM	