

Loyola University Chicago

Syllabus

Organic Chemistry A CHM 223 Sec. 009

Fall 2009

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

Instructor: Donald May Contact: dmay4@luc.edu

Office: Flanner Hall 403 Hours: W 05:00 PM – 06:00 PM F 12:00PM – 01:00PM

Required Materials:

Textbook: Organic Chemistry, Wade, L.G., Jr., 7th ed., Prentice Hall, 2010.

ISBN 978-032-159-2316

Optional: - Study Guide and Solutions Manual, Wade & Simek, 7th ed. ISBN 978-032-159-8714

- Molecular Model kit

Method of instruction: Lecture and discussion. Lectures may be supplemented with classroom discussion, use of molecular models, use of multimedia, and/or use of computer based materials as well as individual and/or group problem solving.

Grading: Semester grades will be determined by the following criteria: three (3) unit exams and one cumulative final exam. See schedule. There are no early and no make-up exams. For a single missed unit exam the final exam will count more. The student must have a valid and verifiable reason for missing the final exam, such as a 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. Students must bring their Loyola I.D to each exam. Students are not allowed to leave during exams. If you leave, you must turn in your exam and you will be considered finished with the exam. Students cannot begin an exam and decide not to complete it. Students must turn in all exam materials when finished.

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, chewing/tobacco products 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. Not all contingencies can be listed but inappropriate conduct will be addressed. 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. 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.

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.

Lecture Outline (tentative, subject to change)

Week	Date	Chapter	Topic	*
1	08/24 08/26	1 2	Lewis structures, bonding, resonance, formal charges, Acid-Base MO theory, hybridization, model, bond rotation	
2	08/31 09/02		Alkanes, nomenclature, conformational analysis, functional groups	
3	09/07 09/09	3	NO CLASS Labor Day- Holiday Cylcoalkanes, stereochemistry	
4	09/14 09/16	4	Free radicals, bond dissociation energy	
5	09/21 09/23	5	EXAM I, Chapters 1-4 Stereochemistry, enantiomers, diastereomers, optical activity, chirality	
6	09/28 09/30	6	Alkyl halides, nomenclature, properties, reaction rates and mechanisms SN1, SN2 comparison E1, E2	
7	10/05 10/07	7	NO CLASS Midterm Break Alkenes nomenclature, degrees of unsaturation, preparation	
8	10/12 10/14	8	Alkene reactions, bromination, hydration, hydroxylation,	
9	10/19 10/21	9	Alkynes, nomenclature, reactions synthesis EXAM II Chapters 5-8	
10	10/26 10/28 10/30	10	Alcohols, classification, nomenclature, properties, synthesis Last day to withdraw with a "W" otherwise "WF"	
11	11/02 11/04	11	Reactions of Alcohols	
12	11/09 11/11	12	IR Spectrsocopy, Mass Spectrometry	
13	11/16 11/18	13	EXAM III, Chapters 9-12 NMR, chemical shifts, splitting patterns, spectra interpretation	
14	11/23 11/25		NO CLASS Thanksgiving Break	
15	11/30 12/02	14	Ethers, nomenclature, synthesis	
16	12/07		FINAL EXAM 07:00 PM – 09:00 PM	