Loyola University Chicago

Organic Chemistry A CHM 223 Sec. 005, 006 Summer Session A May 23 – July 01 2011
Lecture: M, W, F 02:00 PM - 04:50 PM SULLIVAN CENTER – GALVIN AUDITORIUM
Instructor: DONALD MAY Contact: dmay4@luc.edu
Office: Flanner Hall 403: Hours: Friday 12:30 PM - 01:30 PM (other times announced / by appointment)
Required Materials:
Textbook: Organic Chemistry, Wade, L.G., Jr., 7th ed., Prentice Hall, 2010.
ISBN 978-0-321-59231-6

Optional: 1) Study Guide and Solutions Manual Wade & Simek, 7th ed. ISBN 978-0-321-59871-4
2) molecular model kit
3) Pushing Electrons: A Guide for Students of Organic Chemistry, D. Weeks

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. Suggested textbook homework problems will be given but the student will not be required to turn them in.

Grading: Semester grades will be determined by the following criteria: two unit exams and one cumulative final exam. See schedule. There are no early and no make-up exams. 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.

Final course grade: Grading will be based on a curve: The mean, standard deviation and quartiles will be utilized for assigning grades to scores. Grades correlated to scores will be determined from the exam score distribution. Grades assigned will be: A, A-, B+, B, B-, C+, C, C-, D+, D, F.

Student Conduct: Only students enrolled for the class may attend. At all times students are expected to conduct themselves in a 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. Additionally radios, headphones, cell-phones or similar electronic devices must be in silent mode and are not permitted to be in operation during lectures and exams. Students are expected to take care of personal matters before lecture begins. The eating and drinking of food, water, soda, use of tobacco products, chewing gum, are not allowed. Not all possible contingencies for student conduct can be listed, subsequently other modes of student conduct not listed, will be addressed immediately. Disruptive students will be required to leave. Students are responsible for taking care of all personal matters before an exam begins. During exams, keep noises to a minimum. If a cell phone rings (beeps, buzz, etc.) during any exam, the exam will be collected (See Academic Integrity) and the student will not be allowed to continue. Non-religious caps or hats are not allowed to be worn during exams. Additional guidelines for exams will be posted. Exam questions, however, will come predominantly from lecture notes and from concepts related to suggested homework problems. 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/pages when finished. Loose pages should be initialized by the student before turning in the exam. Exams turned in will not be returned until all exams are graded.

Academic Integrity: Consult the Undergraduate Studies Handbook for additional information. All exams are closed book and closed note. No external materials nor personnel are allowed. During exams, violations include but are not limited to: using unauthorized notes or books, looking at another student's exam, talking to other students, a cell phone ringing, answering a cell phone, opening and/or utilizing anything in your book bag, and so forth. Any student found to be in violation or cheating, will be given an "F" for the course and will not be allowed to withdraw.

Lecture Outline (tentative / subject to change)
Schedule: Organic Chemistry Lecture, Chemistry 223 A, Summer A 2011
All classes: M,W,F 02:00 PM - 04:50 PM SULLIVAN CENTER -GALVIN AUDITORIUM

MAY/JUNE

Monday	Tuesday	Wednesday	Thursday	Friday
23 CHP 1	24	25 CHP 2	26	27 CHP 3
30 NO CLASS	31	01 CHP 3,4	02	03 CHP 4

JUNE/JULY

Monday	Tuesday	Wednesday	Thursday	Friday
06 EXAM I CHP 5	07	08 CHP 5/6	09	10 CHP 6/7
13 CHP 7/8	14	15 CHP 8/9	16	17 CHP 9/10
20 EXAM II CHP 10/11	21	22 CHP 11/12	23	24 CHP 12 Last drop day with no "WF"
27 CHP 13	28	29 CHP 13	30	01 FINAL EXAM

In general, the last part of lectures will be utilized for discussion, which will start around 04:30 PM. This will allow students to clarify questions from homework, previous lecture material and so forth. Discussion handouts, to be completed before leaving, will also be given. Lectures will incorporate 50 minutes of time followed with a 10 minute break. Exams will generally cover all material up to and including material from the previous Friday. Lectures subsequent to exams will then continue with new material, 15 minutes after the completion of each unit exam. The lecture on June 29 will be a full lecture. The final exam will be cumulative and will be 2 hours in duration.

Course Practices Required:
College-level writing skills on exams; Communication skills for discussion and articulation of questions; Completion of reading assignments, working through suggested homework and hand-outs.

Learning Objectives:
Students who successfully complete this course will be able to do the following at an acceptable level:
Relate molecular orbital hybridization to bonding types
Name and draw simple and more complex organic structures
Differentiate between isomer types (structural and stereo) and conformers; predict and name different stereoisomers
Describe and differentiate between various mechanisms, such as addition versus substitution and electrophilic versus nucleophilic
Relate reaction mechanisms to intermediates, stereochemistry, and kinetics; predict reaction mechanism from experimentally related data and vice versa
Work with multi-step reaction pathways; develop synthetic pathways to simple organic compounds
Use NMR, IR, UV, and mass spectrometry data to identify structures; predict the spectroscopic data from the structure
Predict both physical and chemical properties of alkanes, alcohols, alkenes, alkynes and alkyl halides