Syllabus - Organic Chemistry I

Course Information

Chemistry 223 - Organic Chemistry I

Instructor: Dr. Chad Eichman
Office: 203 Flanner Hall
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Weekly Schedule

Lecture / Discussion: Tuesday, Wednesday, Thursday 3:30-6:10PM in Life Sciences Building 312

Office Hours

Tuesday 2:00-3:00PM Thursday 10:30-11:30AM

To schedule an alternative appointment, please email me.

Email

You must use your Loyola email address for all communication during this course. Emails from outside sources are often blocked automatically.

Course Description

"Lecture and discussion course for non-chemistry majors surveying nomenclature, structures, properties, stereochemistry, reactions, mechanisms, and syntheses of aliphatic hydrocarbons, alkyl halides, alcohols, and ethers.

Outcome: Students will identify classes of organic compounds and typical reactions, discriminate amongst intermediate stabilities, postulate reaction mechanisms, plan multi-step syntheses, and analyze/interpret spectroscopic data."

Textbook and Additional Course Materials

Textbook: Organic Chemistry (8th Edition)

Authors: L. G. **Wade** Jr. Publisher: Prentice Hall ISBN-10: 0-321-76841-8

Molecular Model Kit: Molecular Visions Organic Model Kit (#3) or Preferred Kit

Website: sakai.luc.edu

Grading

3 Quizzes (30 points)	90	18%
2 Midterm Exams (130 points)	260	52%
1 Final Exam (150 points)	150	30%
Total	500	100%

Quizzes

There are **four** quizzes offered during the semester on the dates listed below. The quizzes will be worth 30 points each. *The lowest scored quiz will be dropped*. There are NO MAKEUP quizzes. If you miss one quiz, it will be dropped and the 3 remaining quizzes will be counted.

Quiz Dates: May 21, May 27, June 10, June 24

Midterm Exams

There are **two** midterm exams during the semester on the dates listed below. The midterm exams will be held on Thursdays following a Q&A session. EACH EXAM COUNTS.

Midterm Exam Dates: May 29, June 12

Final Exam

The final exam will take place **during the last day of class (June 26)** following a short Q&A session. *The final exam is cumulative.* All topics discussed during lecture over the semester are on the final.

<u>IMPORTANT:</u> I must be made aware of any exam conflicts by **Thursday**, **May 22**. I will arrange an alternative exam time ONLY if notified before this date.

Final Grades

A guideline for grades is shown below. At minimum, you will receive the grade indicated, however, if the class average is below ~75%, there may be a curved grading system.

A or A- = 100-89% B+, B, or B- = 88-78% C+, C, or C- = 77-63% D = 62-51% F = 50-0%

Lecture, Discussion, and Reading

The class lectures will be the *most critical source* of information for this course. Because of this fact, please attempt to hold questions to a minimum during the lectures. If you miss a lecture, please find notes from another student in class.

We will hold daily discussions to help develop your problem solving skills through working problems and taking quizzes. This time will also be dedicated to answering questions and clarifying any topic covered in lecture.

Suggested reading assignments will be made throughout the semester. Do not expect to learn all of the course material through the textbook. As stated before, lectures are the best source of instruction for the course and reading assignments will serve to complement and reinforce the lectures.

Problem Sets

There will be multiple problem sets throughout the semester to help you master the course material. The problems will include questions from the Wade textbook as well as additional problems pertaining to the current topics. These can be found on Sakai (sakai.luc.edu/) as the semester proceeds. We will use these problems as a basis for the discussion portion of lecture. The problem sets will NOT be graded and are there to help you prepare for the quizzes and exams.

Class Etiquette

Come to class on time. No talking. No electronic devices. No eating.

Students with multiple violations of classroom etiquette will be subject to point deductions throughout the semester.

Academic Integrity

All students in this course are expected to have read and to abide by the demanding standard of personal honesty, drafted by the College of Arts & Sciences, that can be viewed at: http://www.luc.edu/cas/pdfs/CAS Academic Integrity Statement December 07.pdf

Anything you submit that is incorporated as part of your grade in this course (quiz, exam, lab report, etc.) must represent your own work. Any students caught cheating will, at the very minimum, receive a grade of "zero" for the item that was submitted and this grade cannot be dropped. If the cheating occurred during a course exam, the incident will be reported to the Chemistry Department Chair and the Office of the CAS Dean. Depending on the seriousness of the incident, additional sanctions may be imposed.

Dropping and Withdrawal

Be aware of the following dates in the semester:

May 20: Last day to withdraw without a "W" grade

May 23: Last day to convert from credit to audit

June 20: Last day to withdraw with a "W" grade, thereafter a "WF" will be assigned

Changes to Syllabus

There may be changes to the syllabus during the semester. You are responsible for all syllabus changes made in class whether or not you attend.

Tutoring

The Center for Tutoring & Academic Excellence provides Loyola University students the opportunity to engage in Collaborative Learning conversations that will increase retention of course material, improve study habits, assist in achieving higher grades, and encounter new friends. For more information concerning our free tutoring services visit: www.luc.edu/tutoring/

Disabilities

Students with a university-documented disability should contact me immediately. If your disability requires that quizzes and exams be taken outside of the scheduled time or place, please consult: www.luc.edu/sswd/. Services for Students with Disabilities (SSWD) serves students with disabilities by creating and fostering an accessible learning environment.

Course Topics

Chapter 1: Introduction and Review

Chapter 2: Structure and Properties of Organic Molecules

Chapter 3: Structure and Stereochemistry of Alkanes

Chapter 4: The Study of Chemical Reactions

Chapter 5: Stereochemistry

Chapter 6: Alkyl Halides: Nucleophilic Substitution and Elimination

Chapter 7: Structure and Synthesis of Alkenes

Chapter 8: Reactions of Alkenes

Chapter 9: Alkynes

Chapter 10: Structure and Synthesis of Alcohols

Chapter 11: Reactions of Alcohols

Chapter 12: Infrared Spectroscopy and Mass Spectrometry

Chapter 13: Nuclear Magnetic Resonance Spectroscopy

Chapter 14: Ethers, Epoxides, and Thioethers

Course/Instructor Evaluation – IDEA

Loyola has recently switched to the IDEA program for instructor and course evaluations. At the end of the semester, you will complete an online evaluation of this course based on criteria set by IDEA and by the instructor. For this course, the main objectives are as follows:

- 1) Gaining factual knowledge (terminology, classifications, methods, trends)
- 2) Learning fundamental principles, generalizations, or theories
- 3) Gaining a broader understanding and appreciation of intellectual/cultural activity

Keep these objectives in mind throughout the course.

SUMMER 2014 CALENDAR

Week	Tuesday	Wednesday	Thursday
1	5/20 Chapter 1	5/21 Chapter 1/2 QUIZ 1 (Ch.1)	5/22 Chapter 2/3
2	5/27 Chapter 3/4 QUIZ 2 (Ch. 2/3)	5/28 Chapter 4	5/29 MIDTERM 1 (Ch. 1-4)
3	6/3 Chapter 5	6/4 Chapter 6	6/5 Chapter 7
4	6/10 Chapter 8 QUIZ 3 (Ch. 5,6,7)	6/11 Chapter 9	6/12 MIDTERM 2 (Ch. 5-9)
5	6/17 Chapter 10/11	6/18 No Class	6/19 Chapter 11/14
6	6/24 Chapter 12/13 QUIZ 4 (Ch. 10, 11)	6/25 Chapter 13	6/26 FINAL EXAM (Ch. 1-14)

Note: this calendar is tentative and may change