

Syllabus – Chemistry 223 – Organic Chemistry I

Instructor Information

Instructor: Dr. Chad Eichman
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Office: 203 Flanner Hall
Phone: 773.508.3357

Note: You should use your Loyola email address for all communication during this course. Emails from outside sources are sometimes blocked automatically.

Weekly Schedule

Lecture: Monday and Wednesday 7:00–8:15 PM in Flanner Hall 133
Discussion: Monday 8:15–9:05 PM or Wednesday 8:15–9:05 PM in Flanner Hall 133

Office Hours

Monday 4:00–5:00 PM
Wednesday 4:00–5:00 PM

To schedule an alternative appointment, please email me.

Supplemental Instruction

Starting September 14, Megan Meinke (mmeinke@luc.edu) will hold tutoring for this class at the following times in a location TBA.

Monday 3:00–4:00 PM
Wednesday 5:45–6:45 PM
Thursday 5:00–6:00 PM

Course Description

“A lecture, discussion and laboratory course for chemistry majors covering structure and bonding in organic molecules; nomenclature, chemical and physical properties and reactions of non-aromatic hydrocarbons, alkyl halides, alcohols, ethers; stereochemistry and conformational analysis; and spectroscopy.

Outcome: Students will understand the chemical behavior of organic molecules and the mechanisms of reactions.”

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

Graded Material

Quizzes

There are **five** quizzes offered during the semester on the dates listed below. The quizzes will be worth 40 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 4 remaining quizzes will be counted. Quizzes will be held during the Discussion Section. You will be reminded of this scheduling throughout the semester.

Q1: August 31 or September 2, **Q2:** September 14 or 16, **Q3:** October 7 or 12, **Q4:** November 2 or 4, **Q5:** November 30 or December 2

Midterm Exams

There are **three** midterm exams during the semester on the dates listed below. The midterm exams will be held on Wednesdays during the Lecture. EACH EXAM COUNTS.

Midterm Exam Dates: September 23, October 21, November 18

Final Exam

The final exam will take place during **the second final exam week on Monday, December 7 at 7:00–9:30 PM in Flanner Hall 133.** *The final exam is cumulative.* All topics discussed during lecture over the semester are on the final.

IMPORTANT: Alternate exam dates are ONLY arranged for extenuating circumstances (see below).

Grading Rubric

| | | |
|------------------------------|------|------|
| 4 Quizzes (40 points) | 160 | 16% |
| 3 Midterm Exams (200 points) | 600 | 60% |
| 1 Final Exam (240 points) | 240 | 24% |
| Total | 1000 | 100% |

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 will be a curved grading system.

| | |
|-------------|-------------|
| A = 94–100% | C+ = 75-77% |
| A– = 89–93% | C = 66-74% |
| B+ = 86–88% | C– = 63–65% |
| B = 81–85% | D = 62-51% |
| B– = 78–80% | F = 50-0% |

Excused Absences for Exams

Missed exams will be handled on a case-by-case basis. In general, if you miss an exam because of an illness, death in the family, or any other extenuating circumstance, you must provide written evidence (i.e.- note from doctor, etc.). Once approved, an alternative exam date and time will be assigned. If you miss the final exam with no prior notice, you will receive a zero on the exam and a course letter grade will be assigned.

Lecture, Discussion Section, 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.

The discussion section will 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. The discussion section is optional when there is not a quiz. However, quizzes will be distributed once all questions have been answered and *no one will be admitted into the room once the quiz has begun*.

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 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 Section. 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/advising/academicintegritystatement/>

Anything you submit that is incorporated as part of your grade in this course (quiz, exam, 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:

August 31: Last day to withdraw without a "W" grade

September 6: Last day to withdraw with a 100% Bursar credit

September 20: Last day to withdraw with a 50% Bursar credit

September 27: Last day to withdraw with a 20% Bursar credit

October 30: 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.

Wellness

If there are events in your personal life that directly affects your performance in this course and others, please consult me or contact the Wellness Center (<http://www.luc.edu/wellness/>) or the Dean of Students Office (<http://www.luc.edu/dos/>). These resources are included in your tuition and may be an invaluable resource during the completion of your degree.

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

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) Learning to *apply* course material (to improve thinking, problem solving, and decisions)

Keep these objectives in mind throughout the course.

FALL 2015 CALENDAR

| Week | Monday | Tuesday | Wednesday | Thursday | Friday |
|------|---|--------------------|---------------------------|-----------------------|--|
| 1 | 8/24 | 8/25 | 8/26 | 8/27 | 8/28 |
| 2 | 8/31 QUIZ 1 Last day to drop without a "W" | 9/1 | 9/2 QUIZ 1 | 9/3 | 9/4 |
| 3 | 9/7 Labor Day | 9/8 | 9/9 | 9/10 | 9/11 |
| 4 | 9/14 QUIZ 2 | 9/15 | 9/16 QUIZ 2 | 9/17 | 9/18 |
| 5 | 9/21 | 9/22 | 9/23 MIDTERM 1 | 9/24 | 9/25 |
| 6 | 9/28 | 9/29 | 9/30 | 10/1 | 10/2 |
| 7 | 10/5 Fall Break | 10/6 Fall Break | 10/7 QUIZ 3 | 10/8 | 10/9 |
| 8 | 10/12 QUIZ 3 | 10/13 | 10/14 | 10/15 | 10/16 |
| 9 | 10/19 | 10/20 | 10/21 MIDTERM 2 | 10/22 | 10/23 Mid-semester Alert |
| 10 | 10/26 | 10/27 | 10/28 | 10/29 | 10/30 Last day to withdraw without WF |
| 11 | 11/2 QUIZ 4 | 11/3 | 11/4 QUIZ 4 | 11/5 | 11/6 |
| 12 | 11/9 | 11/10 | 11/11 | 11/12 | 11/13 |
| 13 | 11/16 | 11/17 | 11/18 MIDTERM 3 | 11/19 | 11/20 |
| 14 | 11/23 | 11/24 | 11/25 Thanksgiving | 11/26 Thanksgiving | 11/27 Thanksgiving |
| 15 | 11/30 QUIZ 5 | 12/1 | 12/2 QUIZ 5 | 12/3 | 12/4 Last Day of Classes!! |
| 16 | 12/7 FINAL EXAM | 12/8 | 12/9 | 12/10 | 12/11 |