

Syllabus – Organic Chemistry A

The purpose of this syllabus is to describe the course, resources, and policies. It is meant help all students understand the expectations and requirements for the course, and it should be used as a reference for questions about policies. When updates to the syllabus are made during the term, a new version will be posted electronically, and all students will be notified.

Course Information

Course: Chemistry 223 – Organic Chemistry A (3 credits: Lecture & Discussion)

Prerequisites: Completion of Chemistry 102/106 & Math 118 with a grade of C- or better. A student missing a prerequisite may be withdrawn at any time.

Time Zone: This syllabus lists dates/times using Chicago local time (U.S. Central Time Zone)

In-Person Learning: All graded assignments scheduled during class time are available in class only.

Lectures: Zoom

Course Coordinator: Dr. James Devery (Ph.D.) jdevery@luc.edu

Chemistry 223 is a multi-section lecture & discussion course with common content and common outcomes across all sections. This course includes a Final Exam during the Common Final Exam Period as scheduled by the University. The Course Coordinator is responsible for consultation and coordination with instructors regarding policies, exam writing, and grading. Your Section Instructor is responsible for communicating with you regarding all course content and policies and is the first and primary person you should contact with questions about all aspects of the course. As needed, all Section Instructors will consult with the Course Coordinator throughout the semester.

Section Instructor: Zachary Osner

Instructor Contact Information

Office: Flanner Hall – 200A

Email: zosner@luc.edu

Email timing: All emails sent between the hours of 8:00 am – 6:00 pm Monday-Friday will be answered within 24 hours. Emails sent after 6:00 pm or on Saturday or Sunday will be answered within 48 hours.

Office Hours Policy: Office hours will be held over Zoom per the times listed. Please use this time to if you have extra questions regarding this course. Appointments are not required to attend office hours.

Office Hours Schedule: Mon/Wed/Fri 11:30 – 12:30 pm

Required Course Materials

- Textbook: eText via [WileyPlus](#) and/or hard copy: Organic Chemistry, Klein, David, 4th edition.
- Loyola Sakai course management site: sakai.luc.edu/portal/ and tools integrated into the site.
- Loyola email: messages are sent to the entire class via Sakai, linked to your Loyola email account
- Additional web-based systems will be used for uploading your work and facilitating feedback and evaluation. Registration will be free but required. These may include [Gradescope](#) and other sites.
- Additional software will be used. Downloads will be free but required. These may include applications that convert photos to pdfs (examples: CamScanner, Scannable, GeniusScan), and collaboration materials for group work (example: OneNote).
- Printer will be required to print out quiz and exam templates.

Recommended Course Materials: Molecular Model Kit and Solutions Manual

Copyright/Intellectual Property reminder: Course materials provided by your instructors at Loyola, including my materials, may not be shared outside any course without the instructor's **written permission**. Content posted without permission will be in violation of Copyright/Intellectual Property laws.

Course Content & Learning Outcomes

Topics will include nomenclature, structures, properties, reactions, mechanisms and synthesis of alkanes, alkyl halides, alkenes, alkynes, alcohols and ethers; study of molecular structure, geometry, and properties;

functional groups; reactive organic species; stereochemistry; spectroscopy; spectrometry. If successful, the student will be able to:

1. identify the various classes of organic compounds, their methods of preparation, and typical reactions.
2. name and draw specific organic compounds.
3. visualize and interpret multiple representations of organic molecules depicting connectivity, configuration, and conformations.
4. postulate logical reaction mechanisms for organic reactions.
5. discriminate among relative stabilities of reactive intermediates.
6. plan and write out single and multi-step syntheses using known reagents and conditions.
7. identify and compare general physical properties of organic compounds.
8. analyze, interpret, and predict spectral data (MS, IR, NMR) used in identifying organic compounds.
9. describe and analyze how organic chemistry affects the way we live and die.

The classroom is to be a safe place to question and explore ideas. Student and teacher voices are important to this work. Collegial disagreement can be a healthy part of this process but must always include respect for all members of the class.

Course activities will be designed to help students reach the goal of learning chemistry content and developing critical thinking skills. This will more often be driven by the use of data and reasoning to discover concepts and solutions rather than the identification and exchange of chemical facts and algorithms.

Students are expected to read individually on their own time outside of class.

Class will start with a ~75-minute live lecture over Zoom, followed by a break. The second portion of the class we will continue with another live lecture and finish with sample problems that I will work on, and students will be allowed to ask questions and participate in group discussions regarding the course material being covered. All lectures will be recorded and posted to Panopto.

Student Accommodations

Loyola University provides reasonable accommodations for students with disabilities. Any student requesting accommodations related to a disability or other condition is required to register with Student Accessibility Center (SAC), located in Sullivan Center, Suite 117. Professors receive the accommodation notification from SAC via Accommodate. Students are encouraged to meet with their professor individually in order to discuss their accommodations. All information will remain confidential. Please note that in this class, software may be used to record class lectures in order to provide equal access to students with disabilities. Students approved for this accommodation use recordings for their personal study only and recordings may not be shared with other people or used in any way against the faculty member, other lecturers, or students whose classroom comments are recorded as part of the class activity. Recordings are deleted at the end of the semester. For more information about registering with SAC or questions about accommodations, please contact SAC at 773-508-3700 or SAC@luc.edu.

Course Repeat Rule

Effective with the Fall 2017 semester, students are allowed only THREE attempts to pass Chemistry courses with a C- or better grade. The three attempts include withdrawals (W). The Department advises that it is preferable to complete a course with a grade of C or C-, and to demonstrate growth in future coursework, than to withdraw from a course.

After the second attempt, the student must secure approval for a third attempt. Students must come to the Chemistry Department, fill out a permission to register form or print it from the Department of Chemistry & Biochemistry website: <https://www.luc.edu/chemistry/forms/> and personally meet and obtain a signature from either the Undergraduate Program Director, Assistant Chairperson, or Chairperson in Chemistry. A copy of this form is then taken to your Academic Advisor in Sullivan to secure final permission for the attempt.

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, which can be viewed at:

<https://www.luc.edu/cas/advising/academicintegritystatement/>

A basic mission of a university is to search for and to communicate the truth as it is honestly perceived. A genuine learning community cannot exist unless this demanding standard is a fundamental tenet of the intellectual life of the community. Students of Loyola University Chicago are expected to know, to respect, and to practice this standard of personal honesty.

Academic dishonesty can take several forms, including, but not limited to cheating, plagiarism, copying another student's work, and submitting false documents.

Any instance of dishonesty (including those detailed on the website provided above or in this syllabus) will be reported to The Chair of The Department of Chemistry & Biochemistry who will decide what the next steps may be. Evidence of cheating in this course will result in, at a minimum, a score of zero (which cannot be dropped from grade calculations) and penalty up to failure of the course. College policies include that instructors will report incidents of academic misconduct to their chairperson as well as to the Assistant Dean for Student Academic Affairs in the CAS Dean's Office. I will report incidents to the Chemistry & Biochemistry Department for further action(s).

Loyola University Absence Policy for Students in Co-Curricular Activities (including ROTC):

Students missing classes while representing Loyola University Chicago in an official capacity (e.g., intercollegiate athletics, debate team, model government organization) shall be allowed by the faculty member of record to make up any assignments and to receive notes or other written information distributed in the missed classes.

Students should discuss with faculty the potential consequences of missing lectures and the ways in which they can be remedied. Students must provide their instructors with proper documentation i.e., "[Athletic Competition & Travel Letter](#)" describing the reason for and date of the absence.

This documentation must be signed by an appropriate faculty or staff member and it must be provided to the professor in the first week of a semester. It is the responsibility of the student to make up any assignments. If the student misses an examination, the instructor is required to allow the student to take the examination at another time.

(<https://www.luc.edu/athleteadvising/attendance.shtml>)

Students who will miss class for an academic competition or conference must provide proper documentation to their instructor as early in the semester as possible.

Accommodations for Religious Reasons

If you have observances of religious holidays that will cause you to miss class or otherwise effect your performance in the class you must alert the instructor **within 10 calendar days of the first class meeting of the semester** to request special accommodations, which will be handled on a case by case basis.

Other Items

- A link to the official Loyola calendar can be found here: <https://www.luc.edu/academics/schedules/>
- The Withdraw deadline for the semester is on Friday, June 9.
- Loyola is using SmartEvals to provide instructor & course feedback. OIE will send emails near the end of the term.

Class Recording & Content Information

In general lecture, meetings will be recorded. The following is a mandatory statement for all courses in the College of Arts & Sciences (CAS). We will discuss class norms and standards during the first week and continue the discussion as needed throughout the semester.

Privacy Statement

Assuring privacy among faculty and students engaged in online and face-to-face instructional activities helps promote open and robust conversations and mitigates concerns that comments made within the context of the class will be shared beyond the classroom. As such, recordings of instructional activities occurring in online or face-to-face classes may be used solely for internal class purposes by the faculty member and students registered for the course, and only during the period in which the course is offered. Students will be informed of such recordings by a statement in the syllabus for the course in which they will be recorded. Instructors who wish to make subsequent use of recordings that include student activity may do so only with informed written consent of the students involved or if all student activity is removed from the recording. Recordings including student activity that have been initiated by the instructor may be retained by the instructor only for individual use.

Additional Content, Copyright & Intellectual Property Statement

By default, students may not share any course content outside the class without the informed written consent of the owner of that content. This includes any additional recordings posted by students, materials provided by the instructor, and publisher-provided materials. For example, lectures, quiz/exam questions, book figures/slides, and videos may not be shared online outside the class. In some cases, copyright/IP violations may overlap with breaches of academic integrity. Remember that obtaining consent to share materials is an active process.

Pass/Fail Conversion Deadlines and Audit Policy

A student may request to convert a course into or out of the "Pass/No-Pass" or "Audit" status only within the first two weeks of the semester. For the Fall 2022 semester, students are able to convert a class to "Pass/No-Pass" or "Audit" through Monday, September 12th. Students must submit a request for Pass/No-Pass or Audit to their Academic Advisor.

Health, Safety, and Well-Being On-Campus

Please be familiar with and adhere to all policies and protocols posted on the *Campus Info & Resources* site: <https://www.luc.edu/healthsafetyandwellbeing/campusinforesources/>

WileyPLUS

Organic chemistry is a new language that is spoken in words and structures. The best way to learn a language is to work problems **every day**. The purpose of WileyPLUS assignments is to help you master essential foundational concepts in the course. Remembering and understanding foundational concepts is a prerequisite to **APPLYING** those concepts and analyzing problems: you need to learn the basics first so that you can use them! There will be WileyPLUS assignment sets assigned on Monday, Wednesday, and Friday after each class. Monday's assignment will be due on Wednesday night at 11:59 p.m., Wednesday's assignment will be due on Friday night at 11:59 p.m., and Friday's assignment will be due on Sunday night at 11:59 p.m.

Late Score Policy: You have 2 days after the due date to complete any assignment with a 25% late penalty. After that, you can still complete any assignment with a 70% late penalty.

Quizzes and Unit Exams

A total of four quizzes will be given throughout the semester. You will find the quiz posted in Gradescope at 12:00 p.m CST on the day of the assigned quiz. You must submit one answered, completed copy of the quiz back to Gradescope, no later than 8:00 p.m CST that same night. Do not submit more than one copy of the quiz. You may not discuss or share the questions and answers with any other student in a different quiz group or class. Any violation of these policies will be in violation with the Academic Honesty policy described below. The lowest of your four quiz grades will be dropped. If you miss a quiz, that is the quiz that will be dropped.

No make-up quizzes will be given under any circumstances.

There are three cumulative 50-minute unit exams and one cumulative 2-hour final exam. The three unit exams will be administered at the beginning of the class. Exams will be posted to Gradescope 10 minutes before the exam time. This time is to be used to print out a copy of the exam and get yourself into a quiet and comfortable place. All exams will be proctored over Zoom. Students must take their exams on camera. The camera must be positioned such that both the student's face and hands are always visible. The use of cell phones, tablets, or any electronic devices is prohibited. You may not discuss or share the questions and answers with any other student in any class. Any violation of these policies will be in violation of the Academic Honesty policy described. After the 50 minutes, you will have an additional 10 minutes to scan your exam (I recommend using CamScan) and upload your exam back to Gradescope. Exams will be graded and returned to you via Gradescope as quickly as possible. All grading questions, points of clarification, and grading errors must be brought to the instructor's attention during office hours no later than one week after the return of the exam.

Final Exam

The University sets the schedule for all final exams. The final will be held on:

Friday June 30th, 2:00pm

You will have exactly 2 hours to complete the exam. Additional time will not be granted, even if you start late. There will be no make-up final exams given under any circumstance, and the exam will not be given early, either.

Instructors may not reschedule final exams for a class for another day and/or time during the final exam period. There can be no divergence from the posted schedule of dates for final exams. Individual students who have four (4) final examinations scheduled for the same date may request to have one of those exams rescheduled. If a student reports having four final examinations scheduled for the same date, students should be directed to e-mail a petition to Adam Patricoski, Assistant Dean for Student Academic Affairs, CAS Dean's Office (apatricoski@luc.edu).

Universal Absence Accommodation Policy

The purpose of a universal absence accommodation policy is to account for emergency circumstances (e.g., serious illness, caring for a family member, car accident) that require you to be absent from class, while maintaining fairness in grading for students who attend and complete all in-class graded assignments. We believe that class attendance and participation are essential for your success in this class, and that your health is important to us and our shared community. Please use good judgement and stay home if necessary/prudent for your circumstances.

This is the universal accommodation policy for in-class graded assignments:

- One missed in-class exam due to absence for any reason is already accommodated in the course grading system. Given that only the best two in-class exams are included in this calculation, a missed exam would be the one not included in this calculation, as it would be the lowest score (0%) of the three exams.
- One missed quiz due to absence for any reason is already accommodated in the course grading system. Given that only the best three quizzes are included in this calculation, a missed quiz would be the one not included in this calculation, as it would be the lowest score (0%) of the four quizzes.

You may provide documentation for an absence, but it is not required. These accommodations are automatically available to all students. (If you will require documentation for an absence, please modify this statement)

Course Grading System

The standards for each letter grade are listed here according to all required course components. Each student will receive a midterm grade via LOCUS at least one week prior to the Withdraw deadline for the semester. Grades are only based on the criteria listed in the syllabus: no substitutions, and no additions.

Grading Scheme (Modify highlighted as needed)

WileyPLUS	10%
Quizzes	10%
Unit Exams	50%
Final Exam	30%*
Total score	100%

*the final exam is mandatory to earn a passing grade

Letter Grade Cutoffs*:

A	90.0%	C+	65.0%
A-	85.0%	C	60.0%
B+	80.0%	C-	55.0%
B	75.0%	D	40.0%
B-	70.0%	F	< 40%

Quiz Dates

Quiz 1	Wednesday, May 31
Quiz 2	Wednesday, June 7
Quiz 3	Wednesday, June 21
Quiz 4	Wednesday, June 28

Unit Exam Dates

Unit Exam 1	Friday, June 2
Unit Exam 2	Friday, June 16

Unit Exam 3 Friday, June 23

Final Exam Friday, June 30

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.***

Course Topics & Initial Schedule

Week	Monday	Wednesday	Friday
5/22 – 5/26	Chapter 1: Review Chapter 2: Drawing Molecules	Chapter 2: Drawing Molecules Chapter 14: IR & MS	Chapter 14: IR & MS Chapter 3: Acids & Bases
5/29 – 6/2	No Class	Quiz 1 Chapter 3: Acids & Bases Chapter 4: Alkanes & Cycloalkanes	Unit Exam 1 Chapter 4: Alkanes & Cycloalkanes
6/5 – 6/9	Chapter 5: Stereochemistry	Quiz 2 Chapter 6: Chemical Reactivity & Mechanisms	Chapter 6: Chemical Reactivity & Mechanisms Chapter 7: Alkyl Halides
6/12 – 6/16	Chapter 7: Alkyl Halides Chapter 8: Alkenes	Chapter 8: Alkenes	Unit Exam 2 Chapter 9: Alkynes
6/19 – 6/23	No Class	Quiz 3 Chapter 10: Radicals	Unit Exam 3 Chapter 11: Total Synthesis
6/26 – 6/30	Chapter 12: Alcohols	Quiz 4 Chapter 13: Ethers	Final Exam 2:00 pm