

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 Coordinator: Dr. Zach Osner (Ph.D.) zosner@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.

Course: **Organic Chemistry A**
CHEM 223
Semester: Summer A 2024
Lecture: MWF, Asynchronous, posted on Panopto
Discussion: MW 10-11 AM, Synchronous, Zoom
Quiz/Exams: F 9-11 AM, Asynchronous
Final Exam: Friday June 28th 9-11 AM, Synchronous, Zoom

Professor: **Dr. Caitlin G. Decker, PhD**
Office Hours: MW 9:30-10 AM, Zoom
Email: cdecker@luc.edu
*** No specific problem-solving questions will be answered via email. All such questions can be addressed during discussion section*

Materials: **Textbook**
Klein, David. (2017) Organic Chemistry, 4th edition.
Print or electronic version is fine. Earlier editions are acceptable.

Required Technology
Zoom (<https://www.luc.edu/its/its/teachingwithtechnology/zoom/>)
Non-graphing calculator (ie// TI-30XIIS) -\$13 (amazon)
Gradescope: Entry Code: **YREN3N**
CamScanner (or other app for pdf conversion)

Sakai: All students are enrolled in the class Sakai site. It is imperative that you check this site daily to keep informed of all activities and grades.

Important Dates: June 21st – last date to withdraw with a grade of “W”

Quizzes / Exams: Quizzes / Exams will be available between **9-11 AM** on indicated **Fridays** in Gradescope. Once started, students will have **90 minutes** to complete quizzes or exams. This time allows for any technical difficulties. Exams/quizzes are closed-note, closed-book, with no collaboration.

Quiz 1 – Friday May 24th **Exam 1 – Friday May 31st**
Exam 2 – Friday June 7th **Quiz 2 – Friday June 14th**
Exam 3 – Friday June 21st **FINAL - Friday June 28th 9-11 AM**

Instruction Method: This online course is designed as a “flipped” course in which students are expected to read chapters, watch pre-recorded lectures (Panopto) and complete practice problems (posted / outlined in Sakai) prior to each live (Zoom) discussion session. Discussion sessions may involve teacher-led problem solving (examples), break-out group problem solving, and open question time.

Grade: Quizzes: 20%
Unit Exams: 50%
Final Exam: 30%
*** 1 exam score and 1 quiz score will be dropped (lowest score). There will be NO make-up exams / quizzes. A missed exam / quiz will count as the “dropped”*

Grading Scale:

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

*** Grade rounded up if within 0.5% (84.5 = A- and 84.4 = B+)*

Prerequisite: Chem 102 and 112, or 106.

Course Description: Lecture and discussion. First semester of a two semester sequence for non-chemistry majors. A survey of topics including stereochemistry; spectroscopy; and fundamental concepts of organic chemistry. Nomenclature, properties and syntheses of aliphatic and aromatic hydrocarbons, alkyl halides, alcohols and ethers.

Student Outcomes: Upon completion of this course, a student is expected to be able to

- Identify classes of organic molecules and typical reactions involving these different classes, as well as their synthesis from precursors
- Understand chemical properties that determine stability in molecules, intermediates and transition states
- Postulate reaction mechanisms
- Begin to plan multi-step syntheses
- Analyze and interpret spectroscopic data

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 Policy:

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 Department of Chemistry & Biochemistry website: <http://www.luc.edu/chemistry/forms/> and obtain a signature from 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. Students are encouraged to seek help with the course material early and often during the semester. Attend office hours regularly for assistance before any deficiencies become serious! Information regarding disability services: www.luc.edu/sswd
Loyola Official Academic Calendar: www.luc.edu/academics/schedules

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 affect 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.

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/NoPass” 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 <https://www.luc.edu/healthsafetyandwellbeing/>

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 exam and one missed quiz for any reason is already accommodated in the course grading system. A missed exam or quiz counts as the one dropped, w/ lowest score (0%).

You may provide documentation for an absence, but it is not required. These accommodations are automatically available to all students.

Course Content:

- Ch 1. A Review of General Chemistry: Electrons, Bonds, and Molecular Properties
- Ch 2. Molecular Representations
- Ch 3. Acids and Bases
- Ch 4. Alkanes and Cycloalkanes
- Ch 5. Stereoisomerism
- Ch 6. Chemical Reactivity and Mechanisms
- Ch 7. Substitution and Elimination Reactions of Alkyl Halides
- Ch 8. Addition Reactions of Alkenes
- Ch 9. Alkynes
- Ch 10. Radical Reactions
- Ch 11. Synthesis
- Ch 12. Alcohols and Phenols
- Ch 13. Ethers and Epoxides; Thiols and Sulfides
- Ch 14. Infrared Spectroscopy and Mass Spectrometry

Tentative Course Schedule/Outline:

Our actual pace may vary from this schedule: if you miss a class for any reason, it is your responsibility to immediately contact a classmate for notes/topics covered. We will not cover every topic in every chapter of the textbook this term. Focus first on the material that is directly covered and assigned or recommended. I recommend first watching the lecture, then reading the chapter focusing on the information covered, then watching the lecture again with the book open. Next, attempt all assigned/recommended problems without looking at answers. Review answers and note missed problems. Attempt missed problems again at a later time / date (without looking at answers), then review those and repeat process as necessary.

Week	Date Range	Monday	Wednesday	Friday
1	May 20 th – 24 th	Ch.1/2	Ch. 3/4	Quiz 1
2	May 27 th – 31 st	Memorial Day	Ch. 4/Review	EXAM 1
3	June 3 rd – 7 th	Ch. 5/6	Ch. 7/Review	EXAM 2
4	June 10 th – 14 th	Ch. 8/9	Ch. 10/11	Quiz 2
5	June 17 th – 21 st	Juneteenth	Ch.11/ Review	EXAM 3
6	June 24 th – 28 th	Ch. 12/13	Ch. 14	FINAL EXAM 9-11 AM

Students are expected to watch lectures, read the chapter, and complete practice problems, prior to the discussion dates listed.

Asynchronous Lecture (posted on Panopto)

Synchronous Discussion: M/W 10-11 AM

Asynchronous Quiz / Exams: F 9-11 AM

Synchronous FINAL EXAM: Friday June 28th 9-11 AM