### **Syllabus**

CHEM 223-019 Organic Chemistry I (Fall 2021)

### **COURSE INFORMATION**

### **Course Instructor**

Instructor: Prof. Hee Yeon Cho
Office: Flanner Hall 209
Email: hcho6@luc.edu

#### **Course Schedule**

Lecture: M/W/F 10:50-11:40 AM (CHEM 223-019), Life Science Building 142

Discussion: Friday 8:10-9:00 AM (CHEM 223-020), Flanner Hall 105

Friday 9:30-10:20 AM (CHEM 223-021), Flanner Hall 105

\* Please attend the discussion that you are registered; it is not allowed to switch the section.

Office Hours: By appointment. To schedule an appointment, please email me.

#### **Email**

You must use your Loyola email address for all communication. Emails from other sources are often blocked.

### **Course Materials and Website**

Textbook: Organic Chemistry (4<sup>th</sup> Edition, by David Klein), Wiley

(Required) ISBN-13: 978-1-119-659594

Solutions Manuals: Organic Chemistry Student Study Guide and Solutions Manual

(Recommended) (by David Klein), Wiley

Molecular Model Kit: HGS Molecular Model or Preferred Kit

(Recommended)

Course Website: sakai.luc.edu

#### **GRADING POLICY**

#### **Course Grade**

(1)		Homework Grades (200 points)	200	20%
(2)	2	Highest Midterm Exams (200 points each, 400 points)	400	40%
(3)	1	Final Exam (300 points)	300	30%
<u>(4)</u>		Attitude (100 points)	100	10%
		Total	1000	100%

## (1) Homework (200 points, 20%)

Late homework will **NOT** be accepted. **NO EXCEPTIONS**.

#### (2) Midterm Exams (400 points, 40%)

There are **three** midterm exams on the dates listed below. The lowest midterm grade will be dropped. There are **NO MAKEUP midterm exams**. **NO EXCEPTIONS**.

### (3) Final Exam (300 points, 30%)

The final exam will take place on **Thursday**, **December 16**, **2021 at 8:00–10:00 PM**. The final exam is cumulative. All topics discussed during lecture over the semester are on the final. There are **NO MAKEUP** final exams.

One Exception: Individual students who have four (4) final examinations scheduled for the same date
may request to have one of those exams rescheduled. If you have four final examinations scheduled
for December 16, 2021, you should e-mail a petition to Adam Patricoski, Assistant Dean for Student
Academic Affairs, CAS Dean's Office (apatricoski@luc.edu).

## (4) Attitude (100 points, 10%)

#### **Class Etiquette**

- Attend every class and discussion section, and come to class and discussion section on time.
- No talking & no internet surfing, but you can use your laptop or tablet for note taking.
- <u>Do not ask</u> me about matters that are already mentioned in class or syllabus (e.g. grading policy, makeup exams or quizzes, course policy, etc.).

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

### **Final Grades**

A guideline for grades is shown below, and you will receive the grade indicated below. However, if the class average is below 75% at the end of the semester (i.e. the class average of total point is below 750), there will be a modified grading system. Each exam will not be curved.

Α	=	94–100%	С	=	70-74.5%
<b>A</b> –	=	89–93.5%	C-	=	65-69.5%
B+	=	86–88.5%	D+	=	58-64.5%
В	=	81–85.5%	D	=	50-57.5%
B-	=	78–80.5%	D-	=	46-49.5%
C+	=	75–77.5%	F	=	0-45.5%

#### Lecture and Discussion Section

The class lectures will be the *most critical source* of information for this course. 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. This time will also be dedicated to answering questions and clarifying any topic covered in lecture.

## **COURSE POLICY**

## **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 as a part of your grade in this course (homework, 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:

September 7: Last day to withdraw without a "W" grade.
September 12: Last day to withdraw with a 100% Bursar credit.
September 26: Last day to withdraw with a 50% Bursar credit.
October 3: Last day to withdraw with a 20% Bursar credit.

November 5: Last day to withdraw with a "W" grade, thereafter a "WF" will be assigned.

#### **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: <a href="www.luc.edu/sswd/">www.luc.edu/sswd/</a>. Services for Students With Disabilities (SSWD) serves students with disabilities by creating and fostering an accessible learning environment.

## **Tutoring**

The Center for Tutoring & Academic Excellence provides Loyola 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: <a href="https://www.luc.edu/tutoring/">www.luc.edu/tutoring/</a>

#### Course/Instructor Evaluation - IDEA

Loyola has the IDEA (Individual Development and Educational Assessment) 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 a basic understanding of the subject (e.g., factual knowledge, methods, principles, generalizations, theories)
- 2) Learning to apply course material (to improve thinking, problem solving, and decisions)
- 3) Gaining a broader understanding and appreciation of intellectual/cultural activity (music, science, literature, etc.)

## **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 DESCRIPTION**

This lecture course (CHEM 223) is provided for non-chemistry majors covering nomenclature, properties, reactions, and syntheses of various classes organic compounds. In addition to lectures, weekly discussion sections will be provided to ensure that students gain strong problem-solving skills. At the end of the semester, students will be able to identify and propose synthetic routes for various organic compounds.

### **Course Topics**

- Chapter 1: A Review of General Chemistry: Electrons, Bonds, and Molecular Properties
- Chapter 2: Molecular Representations
- Chapter 3: Acids and Bases
- Chapter 4: Alkanes and Cycloalkanes
- Chapter 5: Stereoisomerism
- Chapter 6: Chemical Reactivity and Mechanisms
- Chapter 7: Alkyl Halides: Nucleophilic Substitution and Elimination Reactions
- Chapter 8: Addition Reactions of Alkenes
- Chapter 9: Alkynes
- Chapter 10: Radical Reactions
- Chapter 11: Synthesis
- Chapter 12: Alcohols and Phenols
- Chapter 13: Ethers and Epoxides; Thiols and Sulfides
- Chapter 14: Infrared Spectroscopy and Mass Spectrometry
- Chapter 15: Nuclear Magnetic Resonance Spectroscopy

# FALL 2021, CHEM 223 CALENDAR

<sup>\*</sup> The final exam time is given by the University. **No make-up finals** will be given.

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1	8/30 <b>Lecture 1</b>	8/31	9/1 <b>Lecture 2</b>	9/2	9/3 No Discussion <b>Lecture 3</b>
2	9/6 Labor Day	9/7 Last day to drop without a "W"	9/8 <b>Lecture 4</b>	9/9	9/10 Discussion 1 Lecture 5
3	9/13 <b>Lecture 6</b>	9/14	9/15 <b>Lecture 7</b>	9/16	9/17 Discussion 2 Lecture 8
4	9/20 <b>Lecture 9</b>	9/21	9/22 <b>Lecture 10</b>	9/23	9/24 Discussion 3 Lecture 11
5	9/27 <b>Lecture 12</b>	9/28	9/29 <b>MIDTERM #1</b>	9/30	10/1 Discussion 4 Lecture 13
6	10/4 <b>Lecture 14</b>	10/5	10/6 <b>Lecture 15</b>	10/7	10/8 Discussion 5 Lecture 16
7	10/11 Mid-Semester Break	10/12 Mid-Semester Break	10/13 <b>Lecture 17</b>	10/14	10/15 Discussion 6 Lecture 18
8	10/18 <b>Lecture 19</b>	10/19	10/20 <b>Lecture 20</b>	10/21	10/22 Discussion 7 Lecture 21
9	10/25 <b>Lecture 22</b>	10/26	10/27 <b>Lecture 23</b>	10/28	10/29 Discussion 8 Lecture 24
10	11/1 <b>Lecture 25</b>	11/2	11/3 <b>MIDTERM #2</b>	11/4	11/5 Discussion 9 Lecture 26
11	11/8 <b>Lecture 27</b>	11/9	11/10 <b>Lecture 28</b>	11/11	11/12 Discussion 10 Lecture 29
12	11/15 <b>Lecture 30</b>	11/6	11/17 <b>Lecture 31</b>	11/18	11/19 Discussion 11 Lecture 32
13	11/22 <b>Lecture 33</b>	11/23	11/24 Thanksgiving Break	11/25 Thanksgiving Break	11/26 Thanksgiving Break
14	11/29 <b>Lecture 34</b>	11/30	12/1 <b>Lecture 35</b>	12/2	12/3 Discussion 12 Lecture 36
15	12/6 Lecture 37	12/7	12/8 <b>MIDTERM #3</b>	12/9	12/10 Discussion 13 Lecture 38

<sup>\*\*</sup> FINAL EXAM: December 16 (Thursday) at 8-10 PM. Common exam time for all sections of CHEM 223.

<sup>\*</sup> The lowest midterm grade (among three) will be dropped. **No make-up midterms** will be given. No Exceptions.

<sup>\*\*\*</sup> All times written on the syllabus are in Central Time (CT).