

Syllabus CHM 250 Organic Chemistry I

INTRODUCTION TO COURSE AND INSTRUCTOR

Semester Spring 2023	Program/Department Chemistry
Course Name CHM 250 Organic Chemistry	Instructor Name Krishnaswami S Raja
Credits and Hours 5 Credits 4Hr	Office Location 6S332
Mode of Instruction: In person classes	Room 1P120
Time Mon, Wed, Thu 6.30-8.10Pm	E-Mail Krishnaswami.Raja@csi.cuny.edu
Location Room 1P120	Telephone 718 982 4091
Website : Blackboard Collaborate	Faculty Office Hours Thursday 2-3pm in person.
If there are questions or concerns that you have about this course that you and I are not able to resolve, please feel free to contact the Chair of the department to discuss the matter.	
CHAIR/PROGRAM DIRECTOR'S NAME	Qiao Sheng Hu
DEPARTMENT NAME	Chemistry
CHAIR/PROGRAM DIRECTOR'S EMAIL	QiaoSheng.Hu@csi.cuny.edu
DEPARTMENT/PROGRAM PHONE NUMBER	7189823900

COURSE DESCRIPTION AND PRE/COREQUISITES

4 lecture hours, 4 laboratory hours. The structure and properties of organic compounds are examined. Emphasis is given to reactions and synthesis of aliphatic and aromatic molecules. Stereochemistry and organic reaction mechanisms are introduced and thoroughly discussed.

Credits 5

Prerequisite CHM 142 and CHM 127

Distribution Life and Physical Sciences or Scientific World (STEM)

It is usually expected that students will spend approximately 2 hours of study time outside of class for every one hour in class. Since this is a 4 Hr class, you should expect to study around an average of 6-8 hours outside of class each week.

REQUIRED COURSE MATERIALS

Organic Chemistry 10th Edition, by F. Carey, ISBN# 978-0073511214.

Solutions Manual for Organic Chemistry, by F. Carey, 10th Edition, ISBN# 978-1259636387

Macroscale and Microscale Organic Experiments 7th edition Kenneth L. Williamson and Katherine M Masters ISBN 978-1-305-57719-0 (laboratory text)

CSI Handout as well as a set of molecular models (recommended) and safety glasses for the laboratory.

COURSE GOALS

Goal #1: Development of critical thinking, analytical reasoning and problem-solving skills.

Goal #2: Acquisition of in-depth knowledge of the scientific theories and their applications in the Organic Chemistry.

STUDENT LEARNING OUTCOMES

1 Students will learn and understand concepts of organic molecules, which include nomenclatures, structures, properties, characterizations, reactions and major mechanisms.

2 Students will develop the ability of predicting the results of reactions, identifying principles that correlate structure and of organic compounds.

3 Students will learn and be able to apply the concept and strategy of organic synthesis.

4 Students will leave with a better appreciation of the logic of creative sciences.

COURSE REQUIREMENTS/ASSIGNMENTS

The classes for CHM 250 will meet in person in Room 1P120. The lectures may also be recorded in case it is possible simultaneously on Blackboard Collaborate as an additional help to students. All students must have a CSI email account and must have a blackboard account. If you have any issues, please contact the CSI helpdesk for help in setting up a blackboard account and CSI email (helpdesk@csi.cuny.edu). Once you sign in to blackboard, you will see this class listed. Please click on the tools link and the link for BB Collaborate Ultra can be seen. The classes will be held in person. The classes will be recorded in the MERGED SECTION of Black board.

Homework assignments should be uploaded in the merged section links.

The individual section will be used for exam grades.

All exams are in person and closed book. Electronic devices including but not limited to cell phones and smart watches must be turned off during the exam. Students are not permitted to leave the class room in the middle of an exam. Any student arriving more than twenty minutes late will not allowed to take the exam. Only the reactions taught in this class by the instructor should be used for solving problems. If you use reactions not taught by the instructor you will not get points for those problems.

All exams will be administered in person.

GRADING POLICY AND EVALUATION

Exam

There will be three exams given at the regular class hours and a cumulative final exam. The exams count ~56% of the lecture grade. No makeup exams will be given.

The comprehensive final exam covers the entire semester's work and counts ~34% of the lecture grade.

Homework: Timely completion of homework assignments is strongly recommended. They will count 10% towards your grade. Homework assignments must be uploaded via blackboard in the appropriate link in the merged sections, emailed homework assignments will not be graded.

The lecture makes up 75% towards the final grade, the remaining 25% is from the lab.

Letter Grade

Your letter grade will be assigned according to the following guideline

A: 90-100, A- : 87-89.5, B+: 81-86.5, B: 75-80.5, B-: 71-74.5, C+ 63-70.5, C 56-62.5, D 54-56, F below 54.

Uploading the chapter 1 homework assignment in time is important. This will be used to determine if you participated in class for verification of enrollment.

Attendance Policy: A student who is absent in excess of 15% of the class hour (6 hours for CHM 250) in the semester is assigned a grade of WU (withdraw unofficially).

Academic Honesty: You must work independently on your exam. Students who receive or give any help during an examination are considered cheating and will automatically receive a grade of F for the course.

Course Syllabus:

The following is a tentative outline of the lecture schedule for CHM 250. It is strongly recommended to read the corresponding part of the textbook before a class to prepare. Since every later chapter is built upon the foundation of earlier chapters, it is imperative to get a good start and not fall behind at the beginning.

NOTE:

Not every chapter of the book will be covered to the same extent. Certain topics will be emphasized, others will not be discussed or just briefly and additional material may be covered at the discretion of the instructor.

COURSE CALENDAR/SCHEDULE

CSI Academic Calendar: <https://www.csi.cuny.edu/academics-and-research/academic-calendars-and-final-examination-schedule>

Chapter Title	Chapter Number	Possible	HW Due Date
Structure Determines Properties	Chapter 1		CH 1 Feb 12
Alkanes and Cycloalkanes: Introduction to Hydrocarbons	Chapter 2		
Alkanes and Cycloalkanes: Conformations and cis-trans Stereoisomers	Chapter 3	E1 CH 1-3	CH 2-3 HW due
Chirality	Chapter 4		
Alcohols and Alkyl Halides: Introduction to Reaction Mechanisms	Chapter 5		
Nucleophilic Substitution	Chapter 6	E2 CH 4-6	CH 4-6 HW due
Structure and Preparation of Alkenes: Elimination Reactions	Chapter 7		
Addition Reactions of Alkenes	Chapter 8		
Alkynes	Chapter 9	E3 CH 7-9	CH 7-9 HW due
Introduction to Free Radicals	Chapter 10		
Conjugation in Alkadienes and Allylic Systems	Chapter 11		
Arenes and Aromaticity	Chapter 12	Cumulative Final	CH 1-12

Exam dates will be announced in class one week before the exam. Exam date is subject to change at the discretion of the instructor

Subject to Change Statement

This syllabus and course calendar/schedule and grading policy is subject to change if deemed necessary by the instructor.

Spring 2023 Withdrawal Policy

According to CSI's spring 2023 Academic Calendar, the last day to withdraw with a grade of W without the permission of an instructor or chair person is May 16 2023

Homework Assignment for CHM 250

The homework assignments have to be uploaded on black board in the location created on black board for this purpose. It is essential that homework assignments are done conscientiously since they contribute greatly to an understanding of the course material. It is better to do the homework problems by writing them out in detail than scanning them all superficially. It is recommended that you work on those in-chapter HW problems (they are relatively easier than end-of-chapter problems) as early as possible after the corresponding sections have been covered in the classroom so that what you learned in the classroom can be perfected by solving HW problems. Some of HW assignment problems may appear in an exam.

**Text: Organic Chemistry, 10th Edition, F. Carey
HW Chem 250 Edition 10 (End of Chapter questions)**

You need to upload the HW online by the due date.

Chapter 1:

1.42,1.44,1.45,1.48,1.49,1.55,1.57,1.61,1.65,1.68

Chapter 2:

2.23,2.24,2.26,2.28,2.32,2.36,2.39,2.41, 2.50,2.53

Chapter 3:

3.21,3.23,3.27,3.28,3.32,3.38,3.39,3.40

Chapter 4:

4.26,4.29,4.33,4.34,4.35,4.36,4.37, 4.38,4.43,4.40

Chapter 5:

5.20,5.22,5.25,5.27,5.28,5.32,5.33,5.35,5.42

Chapter 6:

6.19,6.20,6.24,6.27,6.32,6.37,6.39,6.41,6.43,6.45

Chapter 7

7.31, 7.31,7.33,7.38,7.40,7.41,7.45,7.48,7.50,7.55

Chapter 8

8.25,8.31,8.32,8.39,8.46,8.48,8.50,8.58,8.61,8.66,8.73

Chapter 9

9.16,9.17,9.22,9.27,9.29,9.31,9.36,9.41

Chapter 10

10.21,10.23,10.26,10.29,10.30,10.32

Chapter 11

11.27,11.32,11.33,11.34,11.37,11.46,11.52,11.53

Chapter 12

12.34, 12.39,12.41,12.44,12.57,12.58,12.61,12.42

Recording of Lecture:

Students who participate in this class with their camera on or use a profile image are agreeing to have their video or image recorded solely for the purpose of creating a record for students enrolled in the class to refer to, including those enrolled students who are unable to attend live. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live

CUNY POLICY ON ACADEMIC INTEGRITY

Academic dishonesty is prohibited in The City University of New York. Penalties for academic dishonesty include academic sanctions, such as failing or otherwise reduced grades, and/or disciplinary sanctions, including suspension or expulsion. This policy also defines example of academic dishonesty: cheating, plagiarism, obtaining unfair advantage, and falsification of records and official documents. To read the full policy, please visit the following website:

https://www.csi.cuny.edu/sites/default/files/pdf/privacy/cuny_academic_integrity.pdf

REASONABLE ACCOMMODATIONS AND ACADEMIC ADJUSTMENTS

The City University of New York, in compliance with Section 504 of the Federal Rehabilitation Act of 1973 ("Rehabilitation Act"), the Americans with Disabilities Act of 1990 ("ADA"), New York State Executive Law §296, and New York City Human Rights Law, provides qualified individuals with disabilities the opportunity to participate in programs, activities, or employment. For more information and access to the full policy please visit: <https://www.csi.cuny.edu/about-csi/diversity-csi/office-diversity-compliance/reasonable-accommodations-and-academic-adjustments>

STUDENTS WITH DISABILITIES

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe that you have a disability requiring an accommodation, please contact the Center for Student Accessibility at 718.982.2510/ CSA@csi.cuny.edu. For more information please visit: www.csi.cuny.edu/csa/.

TUTORING AND ACADEMIC ASSISTANCE

The College offers tutoring to students, free of charge. For a complete list of the Tutoring Centers please visit <https://www.csi.cuny.edu/students/academic-assistance/tutoring>

Course Policies & Safety Issues

Disruptive behavior or posting offending chats or conversation in person or online is prohibited in class.

If you are absent from class, it is your responsibility to check on announcements made while you were away.

LATE WORK AND MAKE-UP WORK POLICY

The exams are held in person. Any one later than 20 minutes will be not be able to take the exam.

There are no make-up exams for this course. In case you have a medical reason or documented emergency which is considered reasonable by the instructor one of the exams maybe dropped. **The final exam will not be dropped under any circumstance.** In case you have a medical or other documented valid emergency that prevented you from attending the final exam you need to contact the instructor within 24 hrs and you may be administered another final exam at the discretion of the instructor.

CAMPUS (CIX) EMAIL

Students are expected to check their campus (cix) email regularly. Students must recognize that certain communications, may be time-sensitive, and they may be required to monitor email on a more frequent basis than determined by instructional needs. If students have issues accessing their campus (cix) email please email the helpdesk@csi.cuny.edu or visit the [Virtual Computer Lab](#).