Organic Chemistry II – 2783
CHEM 2452 Section 1
Winter Quarter, 2022

Welcome to Organic Chemistry II! This is the second of a three-quarter series in organic chemistry. The scope of this course broadly focuses on the chemistry of carbon and its compounds. We will discuss basic principles regarding chemical bonding, structure, and classification of organic molecules. We will then apply these concepts to study the chemical reactivity of such compounds. Understanding how molecules interact with others will allow for appreciation of chemical synthesis for the production of compounds useful for society, including pharmaceuticals, agrochemicals, plastics, pesticides and other materials.

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Office: Seeley G. Mudd, Room 132 and Zoom

Lecture: MWF 9:00 a.m. – 9:50 a.m., Boettcher Center Auditorium 101 and Zoom

Recitation: T 9:00 a.m. – 9:50 a.m., Olin Hall 205 and Zoom

Office Hours: By appointment in person or through Zoom. Please e-mail me at least one day in advance.

Textbook: *Organic Chemistry, Sixth Edition,* by Marc Loudon and Jim Parise (Required)

Study Guide: *Study Guide and Solutions Manual to Accompany, Organic Chemistry, Sixth Edition,* by Marc Loudon and Jim Parise (Required)

Molecular Models: Molymod #62053 Organic Chemistry Molecular Model Set by Indigo Instruments or Darling Models from DU Bookstore (Required)

Exams: There will be three 50-minute exams during the quarter worth 100 points each. The final exam will also be worth 100 points. If your final exam score is higher than any 50-minute exam score, the lowest score will be dropped and the final will count for 200 points. ***There will be no makeup exams. If you miss an exam for any reason, that exam will be dropped and the final will count for 200 points. The final exam is not optional.*** *[This exam policy is subject to change]*

Weekly Homework Problems: There will be weekly problem sets to be completed and submitted electronically into Canvas.

These problems are intended to help you understand the lecture material and reading assignments more thoroughly. We will review the problems during Tuesday morning recitation sections. Homework will be due Monday nights by 11 pm. The problems will be graded based on (a) completeness and (b) content for one selected problem. Homework is worth 50 *total points* for the course. The lowest weekly homework score will be dropped. Late submissions receive no credit.

Final Grade: Your final letter grade will be determined out of 450 points and curved appropriately based on overall class performance. *[This grading policy is subject to change]*

Lectures: For the first two weeks, I will cover most material on the ChemDraw and the whiteboard through Zoom. Class will be offered synchronously and will also be recorded and posted on Canvas for asynchronous access. If PowerPoint slides are periodically incorporated in lecture they will be posted afterwards on Canvas.

When we return in person, I will cover most material on the white board using three different colors. I would recommend bringing at least 3 colored pens/pencils to class.

Canvas: The University of Denver uses Canvas as its learning management system. You may log in to https://du.instructure.com with your DU ID number and PioneerWeb password to access the course. Please ensure your settings allow for e-mail announcement notifications. Here are some helpful Canvas resources to get you started:

Canvas Student Quickstart Guide: http://guides.instructure.com/m/8470
Canvas Student Guide: http://guides.instructure.com/m/4212

Academic Integrity: I have high expectations for each and every one of you as students at the University of Denver. While I encourage group study sessions outside of class, I expect you to work independently during in class examinations. Any deviations from this policy will not be tolerated. For more information, please see the University of Denver's official Honor Code at: http://www.du.edu/studentlife/studentconduct/

Science and Engineering Center: Need extra help? The Science and Engineering Learning Center is a collaborative space staffed by undergraduate and graduate learning assistants (LAs) trained to assist students with some first and second year biology, chemistry, physics, computer science and engineering courses. Our goal is to help students grow as problem solvers by assisting with homework sets, lab reports, and preparing for exams. See http://portfolio.du.edu/sec for a complete schedule.

COVID-19 Protocols: Please use the following link for up-to-date safety protocols (the classroom protocol section is particularly relevant): https://www.du.edu/coronavirus/operations/protocols

Week #: Start Date	Topic	Reading
1: 01/03/22	Chapter 10: Alcohols and Thiols	*pp 452 – 476*
	Chapter 10: Oxidation and Chemical Synthesis	*pp 476 – 504*
2: 01/10/22	Chapter 11: Ethers, Epoxides, Glycols, Sulfides	*pp 511 – 536*
	Chapter 11: *Continued*	*pp 536 – 560*
3: 01/17/22	Chapter 12: Introduction to Spectroscopy	*pp 569 – 585*
01/17/22 (M)	*Martin Luther King, Jr Day – Holiday – No Class*	
01/21/22 (F)	**EXAMINATION I (material from Chapter 10.1 through 11.11)**	
4: 01/24/22	Chapter 12: *Continued*	*pp 585 – 605*
	Chapter 13: NMR Spectroscopy	*pp 611 – 645*
5: 01/31/22	Chapter 13: *Continued*	*pp 645 – 672*
	Chapter 14: Alkynes	*pp 681 – 708*
6: 02/07/22	Chapter 15: Dienes, Resonance, Aromaticity	*pp 712 – 741*
02/09/22 (W)	**EXAMINATION II (material from Chapter 10.1 through 14.10)**	
	Chapter 15: *Continued*	*pp 741 – 780*
7: 02/14/22	Chapter 16: Benzene and Derivatives	*pp 789 – 810*
	Chapter 16: Electrophilic Aromatic Substitution	*pp 810 – 830*
8: 02/21/22	Chapter 17: Allylic and Benzylic Reactivity	*pp 836 – 851*
	Chapter 17: *Continued*	*pp 851 – 870*
9: 02/28/22	Chapter 18: Aryl Halides	*pp 879 – 901*
03/02/22 (W)	**EXAMINATION III (material from Chapter 10.1 through 17.6)**	
10: 03/07/22	Chapter 18: *Continued*	*pp 901 – 935*
	Finish Course Material	
11: 03/14/22	Review for Final Exam	*pp 901 – 935*
03/16/22 (W)	**FINAL EXAMINATION (material from Chapter 10.1 through 18.11)**	