Organic Chemistry II – 1959
CHEM 2452 Section 2
Spring Quarter, 2015

UNIVERSITY *of* DENVER

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

Lecture: T/R 8:30 a.m. – 9:50 a.m., Boettcher Center, Auditorium 101

Recitation: W 8:00 a.m. – 8:50 a.m., Olin Hall, Room 205

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

Textbook: *Organic Chemistry, Fifth Edition,* by Marc Loudon (Required)

Study Guide: *Study Guide and Solutions Manual to Accompany, Organic Chemistry, Fifth Edition,* by Marc Loudon and Joseph G. Stowell (Required)

Molecular Models: Molymod #62053 Organic Chemistry Molecular Model Set by Indigo Instruments (Required)

Exams: There will be two 80-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 either 80-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.***

Online Homework through Sapling: There will be weekly problem sets to be completed online through the Sapling system. These problems are intended to help you understand the lecture material and reading assignments more thoroughly. We will review the problems during Wednesday morning recitation sections. Homework will be due Tuesday nights by 11 p.m. The online problems will be graded and are 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 350 points and will be curved appropriately based on overall class performance.

Lectures: I will cover most material on the white board using up to three different colors. I would recommend bringing at least 3 colored pens/pencils to class. ***I will not post my lecture notes online. If you miss a lecture, please see a classmate for the notes.*** If PowerPoint slides are periodically incorporated in lecture they will be posted afterwards on Canvas.

Canvas: The University of Denver has transitioned from Blackboard to the Canvas learning management system. You may log in to https://du.instructure.com with your DU ID number and PioneerWeb (WebCentral) password to access the course. 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 Center is a collaborative space staffed by undergraduate and graduate TAs trained to assist students with first and second year chemistry, physics, computer science and engineering lecture and laboratory courses. Our goal is to help students grow as problem solvers by assisting with homework sets, lab reports, and preparing for exams. The Science and Engineering Center is **not** a one-on-one tutoring center, but is rather a support system where students can get guidance from TAs as well as their peers. This center is open to all DU students. All services are free. Located in the north-west corner of the first floor of the Anderson Academic Commons (west of the writing center). See http://portfolio.du.edu/sec for a complete schedule for all disciplines served.

Preliminary Course Schedule – Subject to Change

Date	Topic	Reading
03/24/15	Chapter 9: Reactions of Alkyl Halides	*pp 377 – 400*
03/26/15	Chapter 9: *Continued*	*pp 400 – 429*
03/31/15	Chapter 10: Alcohols and Thiols	*pp 436 – 459*
04/02/15	Chapter 10: Oxidation and Chemical Synthesis	*pp 459 – 476*
04/07/15	Chapter 11: Ethers, Epoxides, Glycols, Sulfides	*pp 482 – 508*
04/09/15	Chapter 11: *Continued*	*pp 508 – 527*
04/14/15	Chapter 12: Introduction to Spectroscopy	*pp 536 – 552*
04/16/15	**EXAMINATION I (material from Chapter 9.1 through 11.9)**	
04/21/15	Chapter 12: *Continued*	*pp 552 – 571*
04/23/15	Chapter 13: NMR Spectroscopy	*pp 578 – 612*
04/28/15	Chapter 13: *Continued*	*pp 612 – 635*
04/30/15	Chapter 14: Alkynes	*pp 644 – 671*
05/05/15	Chapter 15: Dienes, Resonance, Aromaticity	*pp 676 – 700*
05/07/15	Chapter 15: *Continued*	*pp 700 – 730*
05/12/15	Chapter 16: Benzene and Derivatives	*pp 740 – 762*
05/14/15	**EXAMINATION II (material from Chapter 9.1 through 15.7)**	
05/19/15	Chapter 16: Electrophilic Aromatic Substitution	*pp 762 – 780*
05/21/15	Chapter 17: Allylic and Benzylic Reactivity	*pp 788 – 803*
05/26/15	*Continued*	*pp 803 – 813*
05/28/15	*Course Review*	
06/02/15	**FINAL EXAM (material from Chapter 10.1 through 17.6)**	

Instructions for Using Sapling: Sapling's chemistry questions are delivered in a web browser to provide real-time grading, response-specific coaching, improvement of problem-solving skills, and detailed answer explanations. Dynamic answer modules enable one to interact with 3D models and figures, utilize drag-and-drop synthetic routes, and draw chemical structures - including stereochemistry and curved arrows. Altogether, Sapling is cheaper than a tutor, provides more value than a solutions manual, and goes beyond a mere assessment exercise to give a learning experience.

Students:

1 Go to http://saplinglearning.com and click on your country ("US Higher Ed") at the top right.

2 a. If you already have a Sapling Learning account, log in and skip to step 3.

3 b. If you have Facebook account, you can use it to quickly create a Sapling Learning account. Click "Create an Account," and then "Create my account through Facebook." You will be prompted to log into Facebook if you are not already logged in. Choose a username and password, then click "Link Account." You can then skip to step 3. c. Otherwise, click "Create an Account." Supply the requested information and click "Create My Account." Check your email (and spam filter) for a message from Sapling Learning and click on the link provided in that email.

4 Find your course in the list (listed by subject, term, and instructor) and click the link.

5 Select a payment option and follow the remaining instructions.

• Once you have registered and enrolled, you can log in at any time to complete or review your homework assignments.

• During sign up - and throughout the term - if you have any technical problems or grading issues, send an email to support@saplinglearning.com explaining the issue. The Sapling support team is almost always more able (and faster) to resolve issues than your instructor and TAs.

To optimize your Sapling Learning experience, please keep your internet browser and Flash player up to date and minimize the use of RAM-intensive programs/websites while using Sapling Learning.