

SYLLABUS FOR CHEMISTRY 237A (SLN 11954), Spring 2020
ALL TIMES IN THIS DOCUMENT ARE BASED ON PACIFIC DAYLIGHT TIME YOU MUST SET YOUR SCHEDULE TO THESE TIMES IF YOU ARE IN A DIFFERENT TIME ZONE.

This class will meet on Tuesday and Thursdays at our designated times. There will be polls during that time that impact your grade and your attendance at your specific discussion section time is required. This class will proceed in alignment with the time on the time scheduler.

Instructor: Dr. Benjamin Leipzig
Office: 331C Bagley Hall
Email: bleipzig@uw.edu

Course website: <https://canvas.uw.edu/courses/1370705>

Add or Drop: Chemistry Undergraduate Services: chemugs@uw.edu

Lectures: T, Th 11-12:20 on zoom. Please see below. Zoom meeting ID 432-333-555

Quiz section: On Zoom or canvas conference during your SCHEDULED time.

Office hours: TBD will be on Zoom or canvas conference

Teaching Assistants:	<u>Name</u>	<u>Email</u>	<u>Sections</u>
	Jeffrey Buenaflor	jpbuena4@uw.edu	AA, AB, AC, AD
	Kelsey Berrier	berrikl@uw.edu	AE, AF

NOTE: THIS CLASS WILL BE ADMINSTERED REMOTELY. THE SYLLABUS WILL BE SUBJECT TO CHANGE AS WE SEE HOW THE QUARTER PROGRESSES. ANY NOTIFICATIONS WILL BE SENT OUT BY CANVAS

Quiz sections (remotely on Zoom your attendance is mandatory) Zoom ID

AA	Wednesday	8:30-9:20
AB	Wednesday	9:30-10:20
AC	Wednesday	10:30-11:20
AD	Wednesday	1:30-2:20
AE	Wednesday	2:30-3:20
AF	Wednesday	3:30-4:20

COURSE MATERIALS

Except where indicated, all items are required and available from the University Bookstore:

- **Organic Chemistry, 6th Edition**, Loudon and Parise (*required*)
- *****There is an optional 180 day ebook option*** Please see the link on the canvas site**
- **Study Guide, Organic Chemistry 6th edition**, Loudon and Parise (*optional*).
- **Molecular Model kit** (Optional but HIGHLY RECOMMENDED and acceptable to use on a test) any model molecular model kit is acceptable.
- **Sapling access.** Required, you will continue to use sapling in 238 and 239. *Please see the canvas sapling page for more information*

GRADING

The point distribution for the evaluative components of the course is as follows:

2 Midterm exams (20% each)	40%
Final exam	30%
Sapling	15%
Polleverywhere	5%
Discussion section attendance	5%
End of week interactive quiz	5%
TOTAL	100%

Grade distribution. Your scores for the all assignments will be recorded using the online Gradebooks within the course website. The final average GPA will be between 2.6 and 2.9 with the rest of the course will be graded on a linear scale.

Late work policy. Late work is not accepted; all work must be delivered on time.

LEARNING OBJECTIVES

Students who successfully complete CHEM 237 will be able to:

- Describe the core physical and chemical principles that explain bonding in organic molecules.
- Convert between names, two-dimensional representations and three-dimensional structures of organic compounds.
- Identify acids and bases using both the Lewis and Brønsted-Lowry nomenclature.
- Use Lewis acid and base theory to describe organic reactions using curved arrow notation
- Be able to identify stereoisomers
- Predict the major product of organic reactions with alkenes and specific alkyl halides based on reactant structure and reaction conditions.

GENERAL PRACTICES AND POLICIES

- **This course will take place remotely. Please stay UpToDate as the course may change as we go through the quarter.**
- The course website on canvas will be the mode of communication. Pay attention to all announcements and information that gets posted to the site.
- This course will have two “lectures” a week.
 - There will be posted videos of the course material that you may watch at any time. Tuesday and Thursday at 11-12:20 we will have a zoom canvas conference. Material for the week will be reviewed as well as problems discussed
 - There will be posted polleverywhere questions during these sessions (*5% of your overall grade*). Please see the canvas page for polleverywhere information.
- End of the week canvas quiz (*5% of your overall grade*)
 - Each week there will be a quiz on canvas. There will be interactive material within the quiz that will contain the answers.
 - These quizzes should be quite short and are designed to give you another way to interact with the material.
- Quiz section on Wednesdays (*5% of your course grade 1 dropped after 1st week see your time above.*)
 - We will have 10 discussion sections throughout the quarter. They will take place in a zoom conference with your teaching assistant.
 - Review worksheets will be distributed on canvas prior to the discussion session. The TA may distribute you into smaller groups to discuss the material.
 - Attendance is required and participation will result in *5% of your grade*. You will have 1 free dropped quiz section and attendance will not be graded during week 1.
 - Occasionally we will ask you or your group to submit work on gradescope. This is designed to help you get accustomed to gradescope and to provide feedback to your work. There will be “grading” done on gradescope but only as a way to help you work through problems.
- Homework (*15% of your overall grade lowest score dropped*)
 - Homework will be administered through sapling. www.saplinglearning.com/login **YOU MUST SIGN IN THROUGH CANVAS.**
 - Most weeks you will have 2 assignments (due Wednesdays and Sundays).
 - Grades should be transferred automatically from Sapling to canvas.
 - For more information on sapling, please see the sapling information page.

- Examinations (*20% for each midterms, 30% for final exam*)
 - There will be two midterm exams for this course. Each exam will be on Thursdays 4/30 and 5/28.
 - They will open on canvas on Tuesday at 11 am. You will need to upload a copy of your exam to **Gradescope** by 12:20 pm. For more information on exams please see the canvas page.
 - There will be a 1 hour and 50 minute comprehensive final on Wednesday June 10 at 4:30 pm.
 - The final will be distributed by canvas at 4:30 and you will be required to upload it to gradescope by 6:20.
 - **ALL** exams will be open note and open textbook. Using any internet site outside of our canvas page or the textbook is forbidden and if caught it will be considered academic dishonesty.
 - A sheet containing useful information will be distributed 1 week prior to each test you may print that out and use it on the tests.
- Laboratories
 - There is no lab in this class.
 - This is a prerequisite to get into CHEM 241 (first of two strictly organic chemistry laboratory courses)

KEYS TO SUCCESS

- Watch all videos on time. If you have a question during class ask, your other students may have the same question!
- If a question arises outside of class, ask on the class discussion board.
- Organic chemistry is a cumulative endeavor. Your success in future material is based on your knowledge of the current material. Stay on top of the workload and ask for help if you feel you are starting to fall behind
- Understand the material do not memorize it. Many organic reactions follow the same principles. Memorizing ALL the reactions can be counterproductive compared to understanding the principles.
- Practice consistently and work as a group (maintain appropriate social distancing). Working together will be the best way you learn the concepts of organic chemistry.
- Organic chemistry has a reputation for being a very difficult class. The material is challenging but coming into the class with a positive attitude and strong work ethic can lead to a very rewarding quarter.

ACADEMIC ETHICS

Original work performed in good faith is assumed on all assignments and course components.

The Student Conduct Code (see <http://www.washington.edu/students/handbook/conduct.html>) outlines the following forms of academic misconduct:

- Intentional misrepresentation of credentials
- Falsification of data
- Plagiarism

Failure to adhere to this code of ethics will result in referral for possible disciplinary action as described in the Student Conduct Code. In short, if you have not done something yourself, do not attempt to pass it off as original work. If you have questions about what might cross the line, please do not hesitate to ask your lab or class instructor. It is presumed that the data you record and report in laboratory is your work. In addition, all data analysis and writing you submit should be yours alone, even if you collected data with a laboratory partner. We often find examples of plagiarism in which lab reports are copied from someone else, or from an earlier quarter.

CLASSROOM CLIMATE

Diverse backgrounds, embodiments, and experiences are essential to the critical thinking endeavor at the heart of university education. Therefore, I expect you to follow the UW Student Conduct Code in your interactions with your colleagues and me in this course by respecting the many social and cultural differences among us, which may include, but are not limited to: age, cultural background, disability, ethnicity, family status, gender identity and presentation, citizenship and immigration status, national origin, race, religious and political beliefs, sex, sexual orientation, socioeconomic status, and veteran status. Please talk with me right away if you experience disrespect in this class, and I will work to address it in an educational manner. DCinfo@uw.edu is a resource for students with classroom climate concerns. **We will still maintain these expectations even through our remote learning.**

ACCESS AND ACCOMMODATIONS

Your experience in this class is important to us, and it is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. Disability Resources for Students (DRS) offers resources and coordinates reasonable accommodations for students with disabilities. If you have not yet established services through DRS, but have a temporary or permanent disability that requires accommodations, you are welcome to contact DRS at 206-543-8924 or uwdrs@uw.edu or visit disability.uw.edu. If you have already established accommodations with DRS, the information for the Alternative Testing Contract will be submitted to DRS via their online system. Students with accommodations are solely responsible for scheduling the exams with DRS well in advance of the exam dates. If you require accommodations in the laboratory (including assistants and/or interpreters), please contact the Undergraduate Services Director (Bagley 303D) **in person in the first week** of the quarter to discuss your accommodations.

RELIGIOUS ACCOMMODATIONS

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW policy, including more information about how to request an accommodation, is available at Faculty Syllabus Guidelines and Resources. Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form (<https://registrar.washington.edu/students/religious-accommodations-request/>).

COURSE SCHEDULE

This schedule is tentative and subject to change. Any changes will be announced in class and on the course website.

Week of (Mon)	Lecture Topics, exams , sapling
1 3/30	Lectures: 1, 2 (Introduction to Remote Organic Chemistry and chapters 1.1-2.9) Bonding, Structure and Alkene nomenclature Sapling 1 due MONDAY 4/6 at 11:55pm
2 4/6	Lectures: 3, 4 (chapters 3.1-3.6) Acids and Bases, curved arrow notation, acidity and equilibrium Sapling 2 due Wednesday at 11:55pm, Sapling 3 due Sunday at 11:55pm
3 4/13	Lectures: 5, 6 (chapters 8.1-8.8) Intermolecular forces and stability of molecules Sapling 4 due Wednesday at 11:55pm, Sapling 5 due Sunday at 11:55pm
4 4/20	Lectures: 7, 8 (chapters 4.1-4.5) Structure and properties of Alkenes Sapling 6 due Wednesday at 11:55pm, Sapling 7 due Sunday at 11:55pm
5 4/27	Lectures: 9, 10 (Short lecture chapters 4.6-4.9) Start of Alkene reactivity reaction coordinate diagrams Sapling 8 due Sunday at 11:55pm Exam 1 Thursday 4/30 at 11 am Chapters 1-4 and chapter 8
6 5/4	Lectures: 11, 12 (chapters 5.1-5.6) Continued reactivity of alkenes Sapling 9 due Wednesday at 11:55pm, Sapling 10 due Sunday at 11:55pm
7 5/11	Lectures: 13 14 (Chapter 6) chirality and stereoisomers Sapling 11 due Wednesday at 11:55pm, Sapling 12 due Sunday at 11:55pm
8 5/18	Lectures: 15 16 (Chapters 7) cycloalkanes stereoselective reactions Sapling 13 due Wednesday at 11:55pm, Sapling 14 due Sunday at 11:55pm
9 5/25	Lectures: 17 18 (Short lecture Chapter 9.1-9.4) Sapling 15 due Sunday at 11:55pm Exam 2 Thursday 5/28 at 11 am Chapters 5- 7
10 6/1	Lectures: 19 20 (Rest of chapter 9) Sapling 16 due Wednesday at 11:55pm, Sapling 17 due Sunday at 11:55pm
11 6/8	Final Exam: Wed, June 10th, 2020, 4:30-6:20pm