Portland State University Chemistry 335 Organic Chemistry II – Winter 2021



Land Acknowledgment

Portland State University is in the heart of downtown Portland, Oregon in Multnomah County. We honor the Indigenous people whose traditional and ancestral homelands we stand on, the **Multnomah**, **Kathlamet**, **Clackamas**, **Tumwater**, **Watlala bands of the Chinook**, **Tualatin**, **Kalapuya** and many other indigenous nations of the Columbia River. It is important to acknowledge the ancestors of this place and to recognize that we are here because of the sacrifices forced upon them. In remembering these communities, we honor their legacy, their lives, and their descendants.

A Note about Recent Events

Over the past several months, the U.S. has felt both the emergence of the global COVID-19 pandemic and the heartbreaking effects of long-endured violence against the Black community in the United States. These events have caused, and continue to cause, anxiety, stress, and pain for many members of our community, and will continue to impact each of us in various ways throughout this term. Under these circumstances, it is completely normal to feel overwhelmed or nervous and have difficulty concentrating. I have designed this course with these challenges in mind and am devoted to continuing to work with all of you to create a constructive and empathetic learning environment throughout the term. If your health, well-being, or schoolwork are being impacted by recent events, I encourage you to make use of the resources Portland State University provides, which I have included in this syllabus.

Link to student resources page: https://www.pdx.edu/dean-student-life/student-resources

Course Overview:

The material we will cover in this course will expand on the concepts from Chemistry 334 and rely on the fundamental aspects of structure and bonding in organic compounds and their relationship to reactivity. Throughout the course an effort will be made to emphasize the relevance of physical organic chemistry (thermodynamics and kinetics) on the (relative) reactivity of the functional groups we will explore. Synthesis and the ability to combine multiple reactions in a sequence to deliver a target compound is a practical expression of our knowledge of chemical reactivity, and in many cases a personal expression of our creativity. This course will not be taught from a viewpoint of synthesis, but rather we will use synthesis

to highlight the utility of the reactions that we have examined. We will cover Chapters 14 - 22 from Dr. Strongin's e-book Organic Chemistry: Crosscutting Concepts Vol. 2. I look forward to exploring organic chemistry with you over the winter term.

Instructor: Dr. Shuvasree Ray (shuvray@pdx.edu)

Teaching Assistant: Bryan Metze (bmetze@pdx.edu)

Email Contact:

Please <u>use this subject line for all emails</u>: **CH 335 (specific subject here)**. Due to the large enrollment and large volume of emails I will receive, this formatting will ensure that I will see and reply to your email.

Location and Time:

- Lecture: MWF 11:30 12:35 am; all Zoom meetings can be accessed from the course home page under Calendar. Just click on the links that say the date and 11:30 AM and then follow instructions to join the meeting.
- *Student Drop-in Hours*: Dr. Shuvasree Ray W 12:35 1:30 pm Bryan Metze F 12:45 – 1:45 pm TBD
- Final Exam: Comprehensive Final Exam, Mar. 18, 12:30 2:20 pm

Course Resources/Material:

- D2L (https://d2l.pdx.edu/)
- Textbook: Organic Chemistry: Crosscutting Concepts, Vol 2 (Ch. 14-22)
- ACS Organic Chemistry Examination Guide

Statement for Class Recordings:

We will use technology for virtual meetings and recordings in this course. Our use of such technology is governed by FERPA, the <u>Acceptable Use Policy</u> and PSU's <u>Student Code of Conduct.</u> A record of all meetings and recordings is kept and stored by PSU, in accordance with the Acceptable Use Policy and FERPA. Your instructor will not share recordings of your class activities outside of course participants, which include your fellow students, TAs/GAs/Mentors, and any community-based learning partners that we may engage with. **You may not share any class recordings outside of this course**. Doing so may result in disciplinary action.

Course Elements

D2L:

This will be your primary source of information for CH 335. Here you will find very useful information including news items like announcements, powerpoints, lecture notes, Zoom lecture recordings, additional problem sets and supplemental information. A lot of important and content specific information will be posted for each week under the "course content" tab. I encourage you to explore and consult D2L often.

Textbook:

We will be using Dr. Strongin's e-book for CH 335. Volume II. This may be purchased from the PSU bookstore, however there might be a chance that the bookstore has a slight delay in getting the e-book codes. You can also purchase the e-access code directly from the publisher on http://www.grtep.com/.

Three steps are required: 1) click on the link in First Time User (without access code), 2) Pick the second Portland State University, and 3) pick Organic Chemistry: Crosscutting Concepts Volume II-Robert Strongin.

Grades, Evaluation and Strategy:

- Grades the assignment of letter grades for overall percentage grades will be as follows: A (>89.5%), A- (89.4 85.5%), B+ (85.4 81.5%), B (81.4 77.5%), B- (77.4 73.5%), C+ (73.4 69.5%), C (69.4 65.5%), C- (65.4 61.5%), D+ (61.4 57.5%), D (57.4 53.5%), D- (53.4 49.5%), F (<49.4%). The use of curve of the overall grades is at my discretion do not count on it.</p>
- <u>Evaluation</u> points toward the overall percentage grade are obtained from pre-class D2l quizzes, two midterm exams and a final exam. The individual contribution of each to the overall grades is as follows: 32 points (D2L quizzes)^a, 100 points (midterm exam 1), 100 points (midterm exam 2), 100 points (final exam)^d = 332 points total.
 - o aThere will be 9 D21 quizzes (1 for each chapter, none for chapter 1), with 4 questions, each worth 1 point. ~ 14% of your grade. 1 lowest quiz grade will be dropped.
 - If your final exam score (percentage) is better than either of your midterm exam scores (percentage) then it will replace your lowest midterm score in the calculation of your overall grade. Because of this policy there is no make-up exam possible for midterm or final exam.
- <u>Strategy</u> In order for you to have every opportunity for success in this course I strongly suggest the following strategy.
 - o **<u>Read</u>** the suggested section of the text book <u>**before**</u> we cover the material in class.
 - o **Do** the D2l guizzes before the due date
 - Attend all classes and participate in *i*-clicker questions
 - Attempt the end-of-chapter questions in the back of the text book without looking at the answers
 - o Attend office hours and ask questions if there are concepts that you do not understand.

Exam Policy:

There will be two mid-terms exam and a final exam during the course (see dates below). The final exam will be cumulative. Etiquette and academic integrity will be strictly enforced. All exams for this course during this term will be through D2L course page. You may not give or receive any unauthorized assistance (from another individual, book, notes, web resources) during any examinations for this course. Further, you will also promise to not copy, share, or distribute any material from any examination physically or online via various websites. Failure to do so on your part will result in violating the PSU Code of Student Conduct and Responsibility and may result in disciplinary action.

All students who have a DRC accommodation for exams will receive exam time as recommended by the DRC.

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Incomplete policy:

The following is taken from the Portland State University Office of the Registrar (https://www.pdx.edu/registration/grading-system). "The following criteria must be met for consideration for assigning an Incomplete grade:

- Quality of work in the course up to that point is C- level or above.
- Essential work remains to be done. "Essential" means that a grade for the course could not be assigned without dropping one or more grade points below the level achievable upon completion of the work.
- Reasons for assigning an 'I' must be acceptable to the instructor. The student does not have the right to demand an I. The circumstances must be unforeseen or be beyond the control of the student. An instructor is entitled to insist on appropriate medical or other documentation.
- Consultation must have occurred, and a formal agreement must be reached between instructor and student."

Attendance Policy:

Attendance is not taken during class. However, as adults, I expect you to be determined to grow your knowledge and capabilities by participating in class discussions and assignments. It is strongly recommended that all students attend live lectures, since that is the best way to learn the concepts, keep up with the class and not fall behind. If a student misses a live lecture, it is their responsibility to access the recording when it becomes available on the D2L course page.

Academic Dishonesty:

Academic dishonesty will not be tolerated in this course. Cheating during any examination will be reported and the student(s) will receive a zero for the exam. Please be aware that as you access any assignments or exams for this course, you would be making a pledge that you will not receive any unauthorized assistance (from another individual, books, notes, web resources etc.) during the examination. Further you also make a promise to not copy, share or distribute any material from this course physically or online via various websites. Failure to do so will result in violating the PSU Code of Student Conduct and Responsibility and may result in disciplinary action.

Academic Supports

Students with Disabilities:

If you have a disability and require an accommodation to fully participate in this class, please contact the Disability Resource Center (DRC) office https://www.pdx.edu/drc/. If you have a DRC accommodation plan, you should make an appointment to meet with me to discuss your accommodations.

Student Health and Counselling:

The Student Health and Counselling (SHAC) services remains committed to supporting the health and wellbeing of PSU students. Health Services staff have established telehealth services through secure Zoom video conferencing. Please call 503.725.2800 first to schedule your appointment or visit https://www.pdx.edu/health-counseling/health for more information.

Title IX Reporting Obligation:

Portland State is committed to providing an environment free of all forms of prohibited discrimination and sexual harassment (sexual assault, domestic and dating violence, and gender or sex-based harassment and stalking). If you have experienced any form of gender or sex-based discrimination or sexual harassment, know that help and support are available. PSU has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and on-housing accommodations, helping with legal protective orders, and more. Information about PSU's support services on campus, including confidential services and reporting options, can be found on PSU's Sexual Misconduct Prevention and Response website at: http://www.pdx.edu/sexualassault/get-help or you may call a confidential IPV Advocate at 503-725-5672. You may report any incident of discrimination or discriminatory harassment, including sexual harassment, to either the Office of Equity and Compliance or the Office of the Dean of Student Life.

Please be aware that **all PSU faculty members and instructors are required to report information** of an incident that may constitute prohibited discrimination, including sexual harassment and sexual violence. This means that if you tell me about a situation of sexual harassment or sexual violence that may have violated university policy or student code of conduct, I have to share the information with my supervisor, the University's Title IX Coordinator or the Office of the Dean of Student Life. For more information about Title IX please complete the required student module "Creating a Safe Campus" in your D2L.

Course Schedule:



Please note that the course schedule is tentative and subject to change at my discretion to facilitate the learning process. However, the mid-term dates are firm and will not change under regular circumstances.

Week 1 (Jan. 4 - 10)	
Monday, Jan. 4	Lecture (Introduction and Chapter 14)
Wednesday, Jan. 6	Lecture (Chapter 14 contd.)
Friday, Jan. 8	Lecture (Chapter 14 contd.)
	Quiz 1 on Chapter 14 due Sunday, Jan. 10
Week 2 (Jan. 11 – 17)	
Monday, Jan. 11	Lecture (Chapter 15)
Wednesday, Jan. 13	Lecture (Chapter 15 contd.)
Friday, Jan. 15	Lecture (Chapter 15 contd.)
	Quiz 2 on Chapter 15 due Sunday, Jan. 17
Week 3 (Jan. 18 – 24)	
Monday, Jan. 18	Martin Luther King, Jr. Day, Holiday
Wednesday, Jan. 20	Lecture (Chapter 16)
Friday, Jan. 22	Lecture (Chapter 16 contd.)
	No quiz due this week, Chapter 16 quiz open
Week 4 (Jan. 25 – 31)	
Monday, Jan. 25	Lecture (Chapter 16 contd.)
Wednesday, Jan. 27	Lecture (Chapter 17)
Friday, Jan. 29	Lecture (Chapters 17 contd.)
	Quiz 3 on Chapter 16 due Sunday, Jan. 31
Week 5 (Feb. 1 - 7)	
Monday, Feb. 1	Midterm 1, 11:30 am – 12:30 pm, (Chapters 14 -16)
Wednesday, Feb. 3	Lecture (Chapter 17 contd.)
Friday, Feb. 5	Lecture (Chapter 18)
	Quiz 4 on Chapter 17 due Sunday, Feb. 7
Week 6 (Feb. 8 - 14)	

Monday, Feb. 8	Lecture (Chapter 18 contd.)
Wednesday, Feb. 10	Lecture (Chapter 18 contd.)
Friday, Feb. 12	Lecture (Chapter 19)
	Quiz 5 on Chapter 18 due Sunday, Feb. 14
Week 7 (Feb. 15 - 21)	
Monday, Feb. 15	Lecture (Chapter 19 contd.)
Wednesday, Feb. 17	Lecture (Chapter 19 contd.)
Friday, Feb. 19	Lecture (Chapter 20)
	Quiz 6 on Chapter 19 due Sunday, Feb. 21
Week 8 (Feb. 22 - 28)	
Monday, Feb. 22	Midterm 2, 11:30 am – 12:30 pm, (Chapters 17 – 19)
Wednesday, Feb. 24	Lecture (Chapter 20 contd.)
Friday, Feb. 26	Lecture (Chapter 20 contd.)
	Quiz 7 on Chapter 20 due Sunday, Feb. 28
Week 9 (Mar. 1 – 7)	
Monday, Mar. 1	Lecture (Chapter 21)
Wednesday, Mar 3	Lecture (Chapter 21 contd.)
Friday, Mar. 5	Lecture (Chapter 21 contd.)
	Quiz 8 on Chapter 21 due Sunday, Mar. 7
Week 10 (Mar. 8 - 14)	
Monday, Mar. 8	Lecture (Chapter 22)
Wednesday, Mar. 10	Lecture (Chapter 22 contd.)
Friday, Mar. 12	Lecture (Chapter 22 contd.)
	Quiz 9 on Chapter 22 due Sunday, Mar. 14
Week 11 (Mar. 15 - 21)	
Thursday, Mar. 18,	Comprehensive Final Exam, 12:30 – 2:20 pm, All Chapters 14 - 22