CHEM 0310 • Organic Chemistry 1 • Fall 2025 MWF 10:00-10:50 (152 Chevron Science Center) Recitation: W 17:00-17:50 (152 Chevron Science Center)

Instructor: Professor Yiming Wang GTA's: Star Garrigues (they/them, SLG186@pitt.edu), Mackenzie Titus (MLT130@pitt.edu)
Office: 505 Chevron Science Center

Office hours (subject to revision): M 16:00-16:50, Sa 11:00 to 11:50 on Zoom (Zoom ID: 4126240028), and by appointment; GTA office hours: by appointment; UTA office hours: posted on Canvas Contact information: yimingw@pitt.edu (not wangyi@pitt.edu, another Yiming Wang at Pitt)

Official course description: An introduction to theory and practice of organic chemistry through study of structural principles, reaction mechanisms, and synthesis leading toward end of second term, when complex molecules of biological interest are discussed. Basic goals of the course are to develop appreciation and skill in methods of molecular analysis which have made organic chemistry such a powerful intellectual discipline. Course will prepare student for work in advanced topics of organic chemistry, biochemistry, chemical engineering and health related sciences.

Prerequisites: One year (two semesters or equivalent) of a general chemistry course or instructor permission.

Basis for grades: Grades will be based on the best two midterms out of three, the final exam, and homework graded for effort and completion.

- Best two of three midterm exams (25% each \times 2 = 50%)
- Final exam (40%)
- Four homework assignments (2.5% each \times 4 = 10%)

Extenuating circumstances: The grading scheme may be changed due to extenuating circumstances through two mechanisms: (I) by reducing the weight of the midterm exams and/or (2) assigning you fictitious midterm grade(s) based on your performance on the portion of the final exam that pertains to material covered on that midterm. However, since the final exam serves as a comprehensive evaluation of skills and knowledge gained over the course of a semester, I will only assign you a final letter grade if you take the final exam. If extenuating circumstances prevent you from taking the final or otherwise prevent you from completing the course, I will assign you an incomplete G grade, to be completed within one year after the end of the semester. You should let me know (cc me if you email the TA's) of extenuating circumstances promptly and with corroborating documentation or communication from your academic advisor. A request for a change in grading scheme or a G grade at the end of the semester without evidence is unlikely to be considered legitimate.

Letter grading policy: The top 15% of the class will be guaranteed a grade no lower than A–, the next 25% will be guaranteed a grade no lower than B–, and the next 35% after that will be guaranteed a grade no lower than C. These are lower limits, and the exact percentages will change from year to year. For example, in previous terms, I have given anywhere from 17 to 23% A/A– grades.

Required textbook: Vollhardt and Schore, *Organic Chemistry: Structure and Function* (8th edition, W. H. Freeman, 2018) [ISBN: 978-1319079451].

Recommended resources: I. Solutions to problems in the textbook: Schore, Study Guide and Solutions Manual for Organic Chemistry: Structure and Function (8th ed., W. H. Freeman, 2018) [ISBN 978-1319195748]. **II.** A molecular model kit is highly recommended. The Prentice Hall set available at the University Store is a good one although it is by no means the only choice. **III.** For help with arrow-pushing and proposing reaction mechanisms: Weeks, Pushing Electrons: A Guide for Students of Organic Chemistry (4th ed., Cengage, 2013) [ISBN 978-1133951889].

Homework: Weekly homework will be assigned from the end-of-chapter problems in the textbook and should be completed within one week after they are assigned. On the day of each midterm exam and on the last day of class, I will select one of the weekly homework assignments from the weeks between the previous exam and the current one to be turned in for grading. The announcement will be made in class and on Canvas, and you will have until 7:00 PM (EST) on the day of the announcement to submit the requested assignment electronically through Gradescope. Late homework will not be accepted under any circumstances, including technical difficulties, so if you try to submit the assignment at the last minute, you do so at your own risk. I will accept a hard copy delivered to my office on time if, for some reason, you are unable to submit the assignment electronically. In addition to the graded homework, the UTA's, GTA's, and I will provide additional ungraded problems and exercises for further practice.

Exams: The midterm exams will take place during a 50-minute period. The midterm exams will be tentatively scheduled for **September 26 (F)**, **October 24 (F)**, and **November 21 (F)**, starting at **10:00 AM (EST)**. Make up exams will not be offered (this rule will be enforced rigorously). Late exams will also not be offered (also enforced rigorously). In particular, if you are taking an exam at the DRS testing center, you need to schedule the exam on or up to three days before the exam date for the rest of the class. While each midterm examination will focus on the new course material introduced after the previous midterm and up until the Friday before the scheduled midterm, organic chemistry is cumulative, so you are still responsible for retaining earlier knowledge, including facts and concepts from your general chemistry coursework. An outline of testable topics will be available for each midterm and the final exam. The final exam will take place at the time scheduled by the registrar. The 110-minute final exam will be cumulative.

Exam regrades: Exam regrading is available if you believe a serious grading error was made to your detriment. Regrading requests should be made through Gradescope during the one-week long regrade request window. To make exam scores fairer to students who do not request a regrade, <u>all problems</u> (not just the one that you feel was graded incorrectly) will be re-examined for grading errors, including ones that you may have benefited from, so it's possible your grade is revised downward after the regrade. There is a limit of five exam regrade requests per student for the duration of the course, including the final exam.

Student Opinion of Teaching Surveys: Students in this class will be asked to complete a *Student Opinion of Teaching Survey* by the Office of Measurement & Evaluation of Teaching (OMET). Surveys will be sent via Pitt email and appear on your *CourseWeb* landing page during the last three weeks of class meeting days. Your responses are anonymous. Please take time to provide comments, suggestions, and criticisms for any aspect of the course, including format, content, policies, and overall effectiveness.

University Policies on Academic Integrity: Students in this course will be expected to comply with the University of Pittsburgh's Policy on Academic Integrity. Any student suspected of violating this obligation will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University's *Guidelines on Academic Integrity* (provost.pitt.edu/sites/default/files/academic_integrity_guidelines.pdf). In particular, please take note of the following University statement on academic integrity:

Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity, from the February 1974 Senate Committee on Tenure and Academic Freedom reported to the Senate Council, will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the quiz or exam will be imposed. — Academic Integrity Statement for Syllabi

University Policies on Disability Services: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and Disability Resources and Services (DRS, www.studentaffairs.pitt.edu/drs/), 140 William Pitt Union, (412) 648-7890, drsrecep@pitt.edu, (412) 228-5347 for P3 ASL users, as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course.

Equity, Diversity, and Inclusion: The University of Pittsburgh does not tolerate any form of discrimination, harassment, or retaliation based on disability, race, color, religion, national origin, ancestry, genetic

information, marital status, familial status, sex, age, sexual orientation, veteran status or gender identity or other factors as stated in the University's Title IX policy. The University is committed to taking prompt action to end a hostile environment that interferes with the University's mission. For more information about policies, procedures, and practices, visit the Civil Rights and Title IX Compliance webpage (https://www.diversity.pitt.edu/civil-rights-title-ix-compliance).

I ask that everyone in the class strive to help ensure that other members of this class can learn in a supportive and respectful environment. If there are instances of the aforementioned issues, please contact the Title IX Coordinator, by calling 412-648-7860, or e-mailing titleixcoordinator@pitt.edu. Reports can also be filed online (https://www.diversity.pitt.edu/civil-rights-title-ix/make-report/report-form). You may also choose to report this to a faculty/staff member; they are required to communicate this to the University's Office of Diversity and Inclusion. If you wish to maintain complete confidentiality, you may also contact the University Counseling Center (412-648-7930).

Organic chemistry is a challenging subject and challenging course, and learning outcomes are better when students help each other learn. Thus, I also ask that you work to foster a supportive and inclusive environment that welcomes students of all backgrounds when you form study groups outside of class.

Course schedule & outline (subject to change; check Canvas for announcements):

Page numbers for assigned readings will be announced at the beginning of lecture and posted on Canvas. You will be held responsible for the information contained within the assigned pages and any handouts that are posted in the Course Documents section of Canvas.

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Week I: Bonding, structure, and reactivity (Chapters I and 2)
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Week 2: Reactions of alkanes (Chapters 3 and 4)

Week 3-4: Stereochemistry (Chapter 5)

Midterm exam 1: September 26, 2025 at 10 AM (Fri.)

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Week 5: Stereochemistry (ctd.) (Chapter 5)
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Week 6-7: Haloalkanes (Chapters 6 and 7)

Week 8: Alcohols (Chapter 8)

Midterm exam 2: October 24, 2025 at 10 AM (Fri.)

Week 9: Alcohols (ctd.) and ethers (Chapters 8 and 9)

Week 10: NMR spectroscopy (Chapter 10)

Week II-I2: Alkenes (Chapter II)

Midterm exam 3: November 21, 2025 at 10 AM (Fri.)

Thanksgiving break: November 23 - November 30, 2025

Week 13: Alkenes (ctd.) (Chapters 12)

Week 14: Alkynes (Chapter 13)

Final exam: TBD (as determined by registrar)