

Instructor's Name: Dr. Allegra Liberman-Martin
Instructor's Email: libermanmartin@chapman.edu
Instructor's office hours: Monday 4:00 pm to 6:00 pm in Keck 236
Wednesday 4:00 pm to 6:00 pm in Keck 236

Textbooks/Materials: Organic Chemistry, Author: Klein, Publisher: John Wiley & Sons, Incorporate, Edition: 3rd, Year Published: 2017 (**required**)

Course Description: CHEM 230 is the first semester of a two-semester (one year) study of organic chemistry. Students will learn fundamental and essential concepts, and the relevance of organic chemistry to a number of subjects. Topics of discussion will include the organic functional groups containing carbon-carbon double bonds, triple bonds, the alkyl halides, alcohols, ethers, and organometallic compounds. The structure and properties of organic compounds, nomenclature of organic compounds, stereochemistry, and spectroscopic methods of analysis will also be studied. There will be an emphasis on the relationship between structure and functionality in organic compounds, and the electron pushing mechanisms for organic reactions. Introductory synthetic organic chemistry will be covered.

Course-Wide Intended Learning Outcomes: At the end of this course, each student will be able to:

- Describe, and give examples of the basic principles, concepts, and theories from the first semester of organic chemistry, including the central role of the scientific method and the importance of observation.
- Apply reasoning skills acquired in the classroom to solve problems through assigned homework sets, guided inquiries and laboratory exercises.
- Apply the scientific method to evaluate and analyze data and draw conclusions based upon that analysis.

Program-Wide Intended Learning Outcomes: In addition to the above learning outcomes, CHEM 230 supports, in part, the learning outcomes for the B.Sc. in Chemistry:

- Students will be able to demonstrate competency in chemistry core knowledge and problem solving.
- Students will be able to demonstrate competency in basic chemical laboratory and computation skills.
- Students will be able to apply the scientific method, critical thinking, and analytical skills to design and execute a scientific experiment, thoroughly analyze the results, and arrive at well-reasoned scientific conclusions.
- Students will communicate effectively in speaking and writing to the science community.

Class Structure:

Prior to each class time, you will be expected to:

- Watch the **pre-class videos** made by the instructor
- Complete the assigned **pre-class readings**
- Take the **pre-class quiz**

During class, you will complete an **in-class worksheet** in groups with guidance from the instructor.

After each class, you will be expected to:

- Solidify your learning by **solving the suggested problems**.
- **Attend office hours and SI sessions** with questions you have on any of the concepts introduced in the pre-class materials, in-class worksheets, or in the suggested problems.

Success Strategies: Your deep understanding of fundamental organic chemistry concepts **coupled** with frequent and consistent practice of conceptual and algorithmic problems is crucial for success in this course. And as we progress through the course material, you will build on, and reinforce, fundamental concepts from previous chapters. As a result, your instructor has designed this course to encourage necessary **daily** practice (see Class Structure). In addition, here are some additional best-practices that you are encouraged to implement:

- Dedicate 2 hours to studying and solving organic chemistry problems every day.
- Attend each class prepared to solve more problems. Ask questions!
- Attend office hours frequently with specific questions on concepts or problems you have attempted.
- **Attend Supplemental Instructor (SI) Sessions Once Per Week:** All SIs are students who not only excelled in the course in previous years but are also trained to teach effectively. Each SI will engage you in instructor-approved practice problems. They will also answer any ongoing questions you have.

Recommended workflow:



Pre-class Quizzes: An online quiz will be assigned before every class (except on test days). Pre-class quizzes will be posted on Canvas ≥ 24 hours before the upcoming class and will be **due at 8:30 am the day of class**. The pre-class quiz scores and feedback will be released shortly afterward. Use the report and feedback to assess your understanding of the assigned pre-class reading/video. **There are no make-up quizzes and your lowest six pre-class quizzes will be dropped.**

Test and Final Exam Authorizations: Before each test or the final exam, your instructor will provide you with one 4 x 6-inch notecard. You must write your name on the notecard, and you may write any information that you choose on both sides of the notecard. You must submit this notecard when you turn in your test.

During tests and the final exam:

- You are authorized to use your notecard along with a calculator of your choice.
- You are not authorized to speak with anyone other than your instructor or use the internet while completing tests.

Course Policy on Unauthorized Assistance during Tests: The organic chemistry faculty take cases of academic integrity violations very seriously. All suspected academic integrity violations for any tests or the final exam will be investigated fully according to Chapman's Academic Integrity Policy. The baseline sanction for an academic integrity violation on a test or the final exam is an 'F' in the course.

Students with Testing Accommodations who take accommodated exams at the Testing Center will reserve a time on the scheduled test and final exam dates specified in the **Evaluation** section below.

Make-Up Policy for Tests ONLY: The only reasons that qualify for a make-up test or final exam are: (1) serious illness with proper documentation (i.e., doctor's note or Dean of Students' Letter), or (2) required attendance at an OFFICIAL University event with written notification to the professor PRIOR to the exam and as early as possible. Please note that Greek events are not considered official University events.

Evaluation: Your grade in this course is based on:

- Pre-class quizzes (lowest six quiz scores dropped) (11%)
- Five tests (lowest test score dropped) (64%)
- Final exam (25%)

Assessment	Date
Pre-class quizzes	Before each class day
Test 01	Fri., Sept. 15
Test 02	Fri., Sept. 29
Test 03	Fri., Oct. 13
Test 04	Fri., Oct. 27
Test 05	Fri., Nov. 17
Final cumulative exam	Thurs., Dec. 14, 10:45 am – 1:15 pm (CHEM 230-01) Fri., Dec. 15, 8:00 am – 10:30 pm (CHEM 230-03)

Course Grading Rubric:

Score (%)	Grade	Score (%)	Grade
92 – 100	A	71 – 75	C
89 – 92	A–	67 – 71	C–
86 – 89	B+	62 – 67	D+
82 – 86	B	52 – 62	D
78 – 82	B–	47 – 52	D–
75 – 78	C+	< 47	F

Extra Credit Policy: After each test, links to two post-test surveys will be provided (Reflection Surveys A and B). These surveys are designed to help you analyze your test performance and find strategies that work best for you in learning the material. Completing each post-test survey will result in 0.5% of extra credit being added to your test score.

Course Electronic Access: Course materials including the syllabus are available on Canvas. The Canvas site will be the primary repository of all course components, including pre-class videos, weekly assignments, and answer keys.

Academic Integrity Policy: Chapman University is a community of scholars that emphasizes the mutual responsibility of all members to seek knowledge honestly and in good faith. Students are responsible for doing their own work and academic dishonesty of any kind will be subject to sanction by the instructor/administrator and referral to the university Academic Integrity Committee, which may impose additional sanctions including expulsion. Please see the full description of Chapman University's policy on Academic Integrity at www.chapman.edu/academics/academicintegrity/index.aspx.

Students with Disabilities Policy: In compliance with ADA guidelines, students who have any condition, either permanent or temporary, that might affect their ability to perform in this class are encouraged to contact the Disability Services Office. If you will need to utilize your approved accommodations in this class, please follow the proper notification procedure for informing your professor(s). This notification process must occur more than a week before any accommodation can be utilized. Please contact Disability Services at (714) 516-4520 or visit www.chapman.edu/students/student-health-services/disability-services if you have questions regarding this procedure or for information or to make an appointment to discuss and/or request potential accommodations based on documentation of your disability. Once formal approval of your need for an accommodation has been granted, you are encouraged to talk with your professor(s) about your accommodation options. The granting of any accommodation will not be retroactive and cannot jeopardize the academic standards or integrity of the course.

Equity and Diversity Policy: Chapman University is committed to ensuring equality and valuing diversity. Students and professors are reminded to show respect at all times as outlined in Chapman's Harassment and Discrimination Policy. Please see the full description of this policy at <http://www.chapman.edu/faculty-staff/human-resources/eoo.aspx>. Any violations of this policy should be discussed with the professor, the dean of students and/or otherwise reported in accordance with this policy.

Student Support at Chapman University: Over the course of the semester, you may experience a range of challenges that interfere with your learning, such as problems with friend, family, and or significant other relationships; substance use; concerns about personal adequacy; feeling overwhelmed; or feeling sad or anxious without knowing why. These mental health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. You can learn more about the resources available through Chapman University's Student Psychological Counseling Services here: <https://www.chapman.edu/students/health-and-safety/psychological-counseling/>