

College of Arts & Sciences Organic Chemistry II - CHEM 2025 - Recitations: Syllabus CRNs: 13118 (Monday), 13120 (Wednesday)

Instructor: Dr. G. Robert Shelton

Office: S&T 311H

Office Hours: TBA and by appointment.

Phone: 210.784.2246

Class Hours: M|W 14:00-14:50 Class Location: Madla 203

Email: Bob.Shelton@tamusa.edu

GroupMe: Link

Attendance is mandatory.

Organic Chemistry recitations are smaller sections (~20 students) that meet once a week. The smaller group size allows for discussion and detailed problem-solving that would be difficult in a large lecture hall. The emphasis shifts from just working problems to practicing *mechanisms*, synthesis, and conceptual reasoning. Students will practice recognizing patterns, drawing curved arrows, and predicting products. The recitation bridges the gap between the big lecture and the hands-on problem solving students need to master.

Typical Activities:

- Mechanism practice: Working through step-by-step electron pushing, often with multiple possible pathways.
- Spectroscopy problems: Reviewing NMR, IR, and MS data to deduce structures.
- Synthesis design: Tackling "multi-step synthesis" problems that ask students to build complex molecules from simpler starting materials.
- Problem set review: Going over difficult homework or exam-style questions.
- Group work: Students sketching out mechanisms or syntheses on whiteboards or worksheets in small groups before discussing as a class.
- Quick quizzes: Short assessments on functional groups, reaction conditions, or mechanism steps to encourage preparation.

The instructor guides rather than lectures. They will usually work through one or two problems in detail, then let students try similar ones in groups. They ask leading questions like "Where is the nucleophile?" or "Which bond is most likely to break here?" rather than giving direct answers immediately. In short, an Organic Chemistry recitation is problem-solving heavy, with a strong emphasis on mechanism practice and structural reasoning rather than numerical calculation.

Course Materials

eTextbook: Organic Chemistry A Learner-Centered Approach, by Richard Mullins.

eHomework: Mastering Chemistry by Pearson

Suggested Optional Materials: Molecular Modeling Kits

Course Catalog Description

Recitation helps students develop critical thinking, communication, and empirical/quantitative skills by focusing on student understanding of key chemical concepts to include recognizing, identifying, solving, analyzing, and explaining applications of various chemistry concepts. *Corequisites:* CHEM 2325.

Student responsibilities

Communication. The best way to contact me is through email, grshelto@tamusa.edu (or use the alias Bob.Shelton@tamusa.edu). All correspondence between professors and students must occur via university email accounts. Students are expected to regularly monitor Blackboard (https://tamusa.blackboard.com) for updates on the course, announcements, and other course materials. All students are strongly encouraged to attend office hours or make appointments at other times to discuss course material and answer questions.

Attendance Policy. All students are expected to attend lecture, recitation, and actively engage in class discussion, activities and assignments. Attendance will be monitor and can and will be used to make decisions on cases of borderline grades. If you are absent, you are responsible for the material covered and are expected to get notes, announcements and any other material from another student(s) in the class. Absences will be excused if due to illness (medical excuse), death of a close family member, religious holiday (please inform instructor), official university activity or cancellation of classes, military duties, pregnancy & related conditions and participation in legal proceedings. Excessive absences and tardiness will not be tolerated. <u>Accumulation of more than THREE (3) unexcused absences from lecture and/or recitation will result in the instructor dropping you from the course</u>.

Conduct and Behavior. As an instructor my goal is to create a safe and engaging learning environment. Class disruptions are unacceptable! Asking questions to clarify material during class does not qualify as a disruption and is encourage. If you are disrupting the class you will be ask to leave. Technology in the classroom may be a great a resource but it can also hinder the learning process. Therefore, students are not allow to wear ear buds and headphones and/or use cellphones during class. All cellphones must be on vibrate or turned off for the entirety of the class/recitation/lab period. In case of an emergency call, leave the room before answering the call. Texting during class is prohibited. The use of laptops, tablets or other devices for non-class related activities is not allowed. NO Electronic Devices during Exams! All electronic devices must be completely stored during exams and quizzes. Academic misconduct and attempts to cheat during the exam will be pursued according to Texas A&M-San Antonio code of conduct policy. You are discouraged from leaving the room during an exam. If you need to use the restroom, ask and leave all electronic devices, including smart phones, in the room (assuming they are stored and out of

sight or with the instructor. The academic environment is meant for discussing ideas in a respectful manner. Tolerance, empathy, respect and courtesy help us create a safe environment. Abusive and/or aggressive behavior will result in contacting the University Police Department and immediate removal of the student from the classroom. **Visitors.** Only students enrolled in the course are allowed in the classroom (University policy). No visitors are allowed unless you clear it with me in advance under a special circumstance such as a childcare issue.

IMPORTANT. Each student receives this information during the first lecture. It is your responsibility to read this material and be familiar with the course content, procedures, and grading.