

Chem 241 Advanced Organic Chemistry I

Jose S. Madalengoitia

jmadalen@uvm.edu

Office: Innovation E345

Office hours: Monday 12:30-1:30, Tuesday 11:30-12:30, Wednesday 2:30-3:30

Recommended text: Carey, F. A., and Sundberg, R. J. *Advanced Organic Chemistry, Part B: Reactions and Synthesis*, 5th ed., ISBN: 978-0-387-68354-6.

Important dates

September 30; literature review topic must be approved by me

October 19; Midterm, location and time TBD

November 4; literature review due

Final Exam, TBD

Grading graduate students

Midterm Exam 25%

Cumulative Final Exam 30%

Problem Sets 30%

Special Topics Review Paper 10%

Oral Presentation 5%

Grading undergraduate students

Midterm Exam 25%

Cumulative Final Exam 30%

Problem Sets 30%

Special Topics Review Paper 15%

Learning Objectives: Being able to (i) predict the 3d-structures and reactivities of molecules, (ii) understand how molecules interact with each other in 3d-space and (iii) use this knowledge to derive reaction mechanism & selectivities.

Academic Conduct:

Cheating or plagiarism will be considered grounds for failing the course (a numerical score of zero). All graded assignments must be your own work. Cases of cheating or plagiarism will lead to further disciplinary action, which may include dismissal from the University according to the rules set forth in the University of Vermont's Code of Academic Integrity:

<http://www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf>

Stereochemistry

Conformational, steric and stereoelectronic effects

Basic mechanistic principles

Reactions of nucleophilic carbon

Reactions of nucleophilic carbon with carbonyl carbons

Concerted reactions

Electrophilic additions to carbon-carbon multiple bonds

Religious Holidays:

Students have the right to practice the religion of their choice. *If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes.* You will be permitted to make up work within a mutually agreed-upon time.

Student Learning Accommodations:

In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. More information (including contact information) can be found online at www.uvm.edu/access. ACCESS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations via an accommodation letter to faculty with recommended accommodations as early as possible each semester.