

Organic Chemistry III

Fall Semester 2012

Gustavus Adolphus College

Instructor: Dr. Brian A. O'Brien Nobel 303A

tel. 933-7310, e-mail bobrien@gustavus.edu or bobrien@gac.edu

The class meets in Nobel 305, 10:30 a.m., on Monday, Wednesday, Thursday, and Friday.

The class will be primarily concerned with development of an understanding of the basic mechanistic principles that underlie the reactivity of organic compounds at a molecular level. Coverage will include examples of polar, radical, and concerted mechanisms, in conjunction with physical organic topics such as linear free energy relationships. Some special topics coverage will be selected from among topics such as generation and characterization of carbenes, acidity/superacidity, and organofluorine chemistry. In addition, applications of main-group and transition metal chemistry in organic chemistry will be covered both from both mechanistic and synthetic perspectives. Selected techniques in NMR spectroscopy will also be covered.

Background readings for the course and for student presentations will be drawn from various primary and secondary chemical literature sources, including introductory organic chemistry textbooks (for preliminary reviews of topics to be covered in more depth), chemistry review journals and monographs, and primary chemistry research literature.

The grade for the course will be based on performance on quizzes, homework sets, student presentations on organic chemistry topics from the chemical literature, and a comprehensive final examination. A 20-minute quiz will be given on selected Fridays. Projected quiz dates are: September 14, 28; October 12, 19; and November 2, 9, 16, 30. The final examination is scheduled for the period 10:30 - 12:30 on Friday, December 18.

Grades will be calculated according to the following scheme:

Quiz average (two lowest scores dropped).....	55%
Homework.....	15%
Literature Presentations.....	20%
Final Examination.....	10%

If your score on the final examination is higher than the quiz average, the quiz average will constitute 35% of the grade and the final examination 30%.

Your Commitment

I consider your enrollment in this course to constitute a commitment on your part to principled participation in the various facets of the course (regular class attendance, timely completion of assignments, etc.) and to a genuine effort toward achievement of a thorough understanding of the course material.

(OVER)

It is expected that students enrolled in this course will abide by the Honor Policy as described at

the Gustavus web site listed below:

http://www.gustavus.edu/oncampus/academics/general_catalog/current/index.cfm?pr=acainfo.

Assignments not carried out in accord with these principles will be assigned a grade of zero. The degree of appropriate collaboration on out-of-class assignments will be described on a case-by-case basis. I will be present during in-class writing assignments and during the final exam, not only as a proctor, but so that I will be able to answer questions that might arise during the exercise.