

Course Syllabus

004:228 Organic Reactions Mechanisms Spring 2008

Instructor: Dan Quinn, 315 CB, 335-1335, daniel-quinn@uiowa.edu

Office Hours: Monday, 2:00 p.m. – 3:30 p.m.; Thursday, 10:30 a.m. - noon

Book: Neil Isaacs, *Physical Organic Chemistry*, 2nd Edition, John Wiley & Sons: New York, 1995

Web Site: Course information and materials (syllabus, problem sets, handouts, old exams, exam keys, notes) are posted on the web at www.uiowa.edu/~c004228.

Lectures: MWF, 11:30 a.m. – 12:20 p.m. in C139 PC

Required Activities: 1) Two exams, a midterm and a final, closed book. Times and places will be announced. 2) Problem sets (three or four). Problems set answers will be defended orally. Times and places will be announced.

Course Grades: The maximum possible score is 300 points (200 points for exams; 100 points for problem sets). The grading scale follows:

A ⁺	288-300	(96-100%)	C ⁺	174-191	(58-64%)
A	276-287	(92-96%)	C	156-173	(52-58%)
A ⁻	264-275	(88-92%)	C ⁻	138-155	(46-52%)
B ⁺	240-263	(80-88%)	D	108-137	(36-46%)
B	216-239	(72-80%)	F	<108	(<36%)
B ⁻	192-215	(64-72%)			

Departmental Contact Information: David Wiemer, DEO, 305 CB; Bettie Baumert, Secretary to the Chair, 305 CB, 319-335-0200.

Accommodation of Students with Disabilities: I would like to hear from anyone who has a disability which may require seating modifications or testing accommodations or accommodations of other class requirements, so that appropriate arrangements may be made. Please contact me after class or during my office hours.

Cross Enrollment: This course is given by the College of Liberal Arts & Sciences (CLAS). This means that class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by the CLAS. Students wishing to add or drop this course after the official deadline must receive the approval of the Dean of the CLAS. Details of the University policy on cross enrollments can be found at: <http://www.uiowa.edu/~provost/deos/crossenroll.doc>.

Plagiarism and Cheating: The policy of the CLAS on plagiarism and cheating can be found in the **Student Academic Handbook; IX. Student Rights and Responsibilities** (http://www.clas.uiowa.edu/students/academic_handbook/ix.shtml). If a student is caught cheating, he/she will be so informed in writing by the course instructor. As necessary, a written report of the incident will be sent to the Chemistry Department DEO, who subsequently sends a copy of the report to the Associate Dean for Academic Programs and Services. Cheating will result in a grade of F for the activity or assignment on which cheating was detected.

Making a Suggestion or a Complaint: Students have the right to make suggestions or complaints and should first visit with the instructor, then with the course supervisor if necessary, and next with the departmental DEO. All complaints must be made as soon as possible. For more information visit, [Student Complaints](http://www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5) at http://www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5.

Student Classroom Behavior: Students have the right to a classroom environment that encourages learning. The ability to learn is lessened when students engage in inappropriate classroom behavior, distracting others; such behavior also is a violation of the [Code of Student Life](#). When disruptive activity occurs, a University instructor has the authority to determine classroom seating patterns and to request that a student exit the classroom, laboratory, or other area used for instruction immediately for the remainder of the period. One-day suspensions are reported to appropriate departmental, collegiate, and Student Services personnel (Office of the Vice President for [Student Services](#) and Dean of Students).

Sexual Harrasment: Sexual harassment is reprehensible and will not be tolerated by the University. It subverts the mission of the University and threatens the well-being of students, faculty, and staff. Visit this [site](http://www.sexualharassment.uiowa.edu/) (<http://www.sexualharassment.uiowa.edu/>) for definitions, assistance, and the full University policy.

Reacting Safely to Severe Weather: If severe weather is indicated by the UI outdoor **warning system**, class members will seek shelter in the innermost part of the building, if possible at the lowest level, staying clear of windows and of free-standing expanses which might prove unstable. The class will resume after the severe weather has ended. See the Operations Manual section **16.14. i**.

Course Outline

Chapter	Chapter Title	Problems
Handouts	Electron Pushing	Problem Set 1
2	Kinetics and Thermodynamics	1, 2, 3, 4, 6
3	Reagents and Reactions Mechanisms	1, 2, 3 (just outline the three mechanisms)
4	Correlations of Structure with Reactivity	1,3,4,6
6	Acids and Bases, Electrophiles and Nucleophiles	2, 3, 6, 7
7	Kinetic Isotope Effects	Problem Set 3
14	Pericyclic Reactions	2, 3, 4a-g, 4j-n
16	Organic Photochemistry	Study the Notes