



Course Syllabus: Advanced Organic Chemistry
McCoy College of Science, Mathematics, and Engineering
CHEM 4133
Spring

Contact Information

Instructor: Dr. Christopher A. Hansen
Office: Bolin 307B
Office hours: TBD
Office phone: (940) 397-4285

Course Description

This course is a continuation of CHEM 2003, 2013 and providing a comprehensive study of the physical and chemical characteristics of compounds of carbon. You will learn how to write reaction mechanisms and structure determination of these of these compounds using spectroscopy.

Textbook & Instructional Materials

Required: *Writing Reaction Mechanisms in Organic Chemistry*, 2th ed. A. Miller, P.H. Solomon, 2000, Academic Press. (Online version only)

Or

Writing Reaction Mechanisms in Organic Chemistry, 3rd ed. K. Savin, 2014, Academic Press. ISBN: 9780124114753 (hard copy)

Recommended: Darling Molecular Model Kit (chemistry office).

Introduction to Polymer Chemistry, 3rd ed., Charles E. Carraher, Jr., 2013, CRC Press, ISBN: 9781466554948 (Hardback)

Student Handbook

Refer to: [Student Handbook 2020-21](#)

Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting, or the submission for credit of work not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.

[Student Handbook 2020-21](#)

Grading

Table 1: Points allocated to each assignment

Assignments	Points
PowerPoint Presentation (extra credit)	15
Exams (3 at 100 points each)	300
Final Exam	100
Total Points	400

Homework

No homework will be graded for this class

Quizzes

No Quizzes will be given in this class

Exams

There will be three exams plus a comprehensive final exam. Dates are in the schedule section. There will be no make-ups on exams once they are graded and handed back.

Important Dates

Desire-to-Learn (D2L)

Use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a source of communication regarding assignments, examination materials, and general course information. You can log into [D2L](#) through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

Attendance

Attendance is expected as stated in the Student Handbook.

Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to [Disability Support Services](#).

College Policies

Campus Carry Rules/Policies

Refer to: [Campus Carry Rules and Policies](#)

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on University property or at University-sponsored activities.

Course Schedule

Week of	Chapter	Topic
January 16	1	Molecular Structure
January 23	1	and Reactivity
January 30	2	General Principles for Writing Reaction Mechanisms
February 6	3	Reaction of Nucleophiles and Bases
February 13	TEST 1	Chapters To Be determined
February 20	4	Reactions Involving Acids and
February 27	4	Other Electrophiles
March 6	5	Radicals and Radical Anions
March 13	Break	Spring Break
March 20	5	Radicals and Radical Anions
March 27	Test 2	Chapters To Be determined
April 3		Polymers
April 10		Polymers
April 17		Polymers
April 24		Polymers
May 1	Test 3	Chapters To Be determined
May 11	FINAL	Comprehensive Final 8:00-10:00 Thursday, April 29th