

CHEM 6941 - Advanced Organic Chemistry 1

Fall 2026 Syllabus, Section 01, CRN 43335,

Credit hours: 3

Instructor

Shiva Moaven

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Public Instructor Information

Instructor Title:

Assistant Professor

Instructor Professional Qualifications:

Postdoctoral Scholar, The Ohio State University

Postdoctoral Scholar, University of Oregon

Ph.D., Chemistry, Texas Tech University

Instructor Office Location:

Ward Beecher Science Hall, Room 6014

Instructor Office Phone:

330-941-1425

Course Description

6941. Advanced Organic Chemistry 1. Principles of chemical bonding and structure in organic molecules, physical organic chemistry, structure of reactive intermediates, stereochemistry, and detailed descriptions of reaction mechanisms. 3 s.h.

Prerequisites: I will expect you to know the following concepts: 1) S_N2 , S_N1 , E1, and E2 mechanisms. 2) definitions of nucleophile, electrophile, and leaving group. If you are not comfortable with these concepts, please review them and bring yourself up to speed.

Course Readings

Group	Title	Author	ISBN
Required	Advanced Organic Chemistry Part A: Structure and Mechanisms	Carey, F. A.; Sundberg, R. J.	978-0-387-44899-3
Required	The Art of Writing Reasonable Organic Reaction Mechanisms	Grossman, R. B.	978-3-030-28733-7

Both eBooks are available free of charge via OhioLINK.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Tentative Schedule

Week of	Proposed Topic	Due/To Prepare for Class
8/24	Carey Chapter 1	
8/31	Carey Chapter 1	
9/7	Carey Chapter 2	
9/14	Carey Chapter 2	
9/21	Carey Chapter 3	
9/28	Carey Chapter 3	
10/5	Grossman Chapter 1	Exam 1 (10/07/2026)
10/12	Grossman Chapter 2	
10/19	Grossman Chapter 2	

10/26	Grossman Chapter 3	
11/2	Grossman Chapter 3	
11/9	Grossman Chapter 4	Exam 2 (11/11/2026)
11/16	Grossman Chapter 4	
11/23	Grossman Chapter 5	
11/30	Grossman Chapter 5	
12/7	Final Exam	12/07/2026, 5:30-7:30 pm; (comprehensive)

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.