

Basic Principles of Organic Chemistry

CHM 5224, Fall Semester 2023

Instructor: Professor Alex Grenning

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Teaching Assistant: Mr. Akash Gogate

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When and Where:

- Classroom Location: CCB 221. Lectures will be in person.
 - Some lectures may be broadcasted on Zoom:
 - <https://ufl.zoom.us/j/94029090435?pwd=cDRuMUdrWGtCYUF0bkVwNVZrQ2d2QT09>
 - Meeting ID: 940 2909 0435
 - Passcode: UF_OChem!
 - *Classes/Lecture:* M,W,F | Period 3 (9:35 AM - 10:25 AM)
 - *Mechanisms and Q&A with Akash:* Thursdays LEI 0207, 6:15 – 7:05 PM
 - *Make Up Classes:* Select Thursdays LEI 0207, 6:15 – 7:05 PM
 - *Exams:* Select Thursdays in LEI 0207, 6:15 – 9:15 PM (no class Fridays after exams)
 - *Final Exam:* No Final Exam
 - *Office Hours:* Tuesdays 8:00 – 9:15 AM; Wednesday: 12:00 PM – 1:15 PM
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Course Description:

Course Objective: To learn fundamental principles pertinent to organic synthesis with special emphasis on reactivity, electron-pushing, and reactions.

Course Content: We will follow Grossman's textbook (See Required Texts) with additions from *other sources* (recommended texts, review articles, primary literature, and other sources).

- "The Basics"
- *Polar reactions under basic conditions*
- *Polar reactions under acidic conditions*
- *Pericyclic reactions*
- *Chemistry of Transition Metals*

Teaching Philosophy: The course will be primarily lecture, problem solving, and Q&A.

Attendance:

- Attendance to MWF lecture is required.
- Every Thursday evening (6:15 – 7:05 PM) there is an *optional* mechanism workshop / office hour with Akash Gogate, this course's Teaching Assistant.

Required Texts:

- *The Art of Writing Reasonable Organic Reaction Mechanisms*, 2nd or 3rd Ed., Robert Grossman. Physical and electronic copies available.

Recommended Texts:

- *Advanced Organic Chemistry, Part A*, 5th Ed., Francis A. Carey and Richard J. Sundberg. Physical and electronic copies available.
 - *Strategic Applications of Named Reactions in Organic Synthesis*, Laszlo Kurti and Barbara Czako
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Exams, Quizzes, and Grading:

Grading:

- There will be five exams through the semester. See the calendar below for details.
- Exams will be curved.
- Exam length and point value may vary with a range of 75 – 100 pts each.
- There will be ~10 x 10 point quizzes given in class on Fridays. Quizzes are due by the afternoon of the same Friday they are assigned. You can work in small groups. The lowest score is dropped and the remaining ~9 will be factored into the final grade.

Homework:

I will recommend problems from the Grossman textbook, but no assignments will be collected. That said, working problems is integral to your success.

Exam-Day Absence Policy:

Excused exam absences, in accord with university policy, are allowed, if properly documented and disclosed to Prof. Grenning at least one week before the anticipated conflict. In such cases, students will be given the opportunity to take a conflict exam before the scheduled exam.

Unexcused exam absences are not covered under the above conflict exam policy. Exceptions may be made for medical emergencies, if properly documented. In these cases, special arrangements can be made to take the exam.

No exams will be administered to absent or otherwise compromised students for a grade after the established and scheduled exam time.

Accommodations for Students with Disabilities:

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation

UF Honor Code:

The UF Student Honor Code (see <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/> for details):

We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

Honor Code violations include copying on an exam (or helping another student to copy) and/or turning in an exam for regrading that has been changed since it was graded by the instructor.

Any student found responsible for an academic honesty violation in this course will forfeit any applicable exam

drop policy and be recommended sanctions consistent with the offense.

Classroom Etiquette:

Cell phone or other small electronic device use of any sort is strictly prohibited in the lecture hall at all times.

Evaluations:

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>

Schedule (subject to change):

Date	Day	Time		Date	Day	Time	
<i>read to entirety of chapter 1 before class starts</i>				23-Oct	Monday	9:35 AM – 10:25 AM	CH 4, Class 1
23-Aug	Wednesday	9:35 AM – 10:25 AM	CH 1, class 1	25-Oct	Wednesday	9:35 AM – 10:25 AM	CH 4, Class 2
25-Aug	Friday	9:35 AM – 10:25 AM	CH 1, class 2	27-Oct	Friday	9:35 AM – 10:25 AM	CH 4, Class 3
28-Aug	Monday	9:35 AM – 10:25 AM	CH 1, class 3	30-Oct	Monday	9:35 AM – 10:25 AM	CH 4, Class 4
30-Aug	Wednesday	9:35 AM – 10:25 AM	CH 1, class 4	1-Nov	Wednesday	9:35 AM – 10:25 AM	CH 4, Class 5
1-Sep	Friday	9:35 AM – 10:25 AM	CH 1, class 5	3-Nov	Friday	9:35 AM – 10:25 AM	CH 4, Class 6
4-Sep	Monday	NO CLASS: LABOR DAY		6-Nov	Monday	9:35 AM – 10:25 AM	CH 4, Class 7
6-Sep	Wednesday	9:35 AM – 10:25 AM	CH 1, class 6	8-Nov	Wednesday	9:35 AM – 10:25 AM	CH 4, Class 8
7-Sep	THURSDAY	6:15 PM – 8:15 PM	EXAM 1	10-Nov	Friday	NO CLASS: VETERAN'S DAY	
8-Sep	Friday	no class; read the entirety of chapter 2		13-Nov	Monday	9:35 AM – 10:25 AM	CH 4, Class 9
11-Sep	Monday	9:35 AM – 10:25 AM	CH 2, Class 1	15-Nov	Wednesday	9:35 AM – 10:25 AM	CH 4, Class 10
13-Sep	Wednesday	9:35 AM – 10:25 AM	CH 2, Class 2	16-Nov	THURSDAY	6:15 PM – 8:15 PM	EXAM 4
15-Sep	Friday	9:35 AM – 10:25 AM	CH 2, Class 3	17-Nov	Friday	no class; read the entirety of chapter 6	
18-Sep	Monday	9:35 AM – 10:25 AM	CH 2, Class 4	20-Nov	Monday		Ch 6, Class 1
20-Sep	Wednesday	9:35 AM – 10:25 AM	CH 2, Class 5	22-Nov	Wednesday	NO CLASS: THANKSGIVING	
22-Sep	Friday	9:35 AM – 10:25 AM	CH 2, Class 6	24-Nov	Friday	NO CLASS: THANKSGIVING	
25-Sep	Monday	9:35 AM – 10:25 AM	CH 2, Class 7	27-Nov	Monday	9:35 AM – 10:25 AM	CH 6, Class 2
27-Sep	Wednesday	9:35 AM – 10:25 AM	CH 2, Class 8	29-Nov	Wednesday	9:35 AM – 10:25 AM	Ch 6, Class 3
28-Sep	THURSDAY	6:15 PM – 8:15 PM	EXAM 2	1-Dec	Friday	9:35 AM – 10:25 AM	CH 6, Class 4
29-Sep	Friday	no class; read the entirety of chapter 3		4-Dec	Monday	9:35 AM – 10:25 AM	CH 6, Class 5
2-Oct	Monday	9:35 AM – 10:25 AM	CH 3, Class 1	6-Dec	Wednesday	9:35 AM – 10:25 AM	CH 6, Class 6
4-Oct	Wednesday	9:35 AM – 10:25 AM	CH 3, Class 2	8-Dec	Friday	9:35 AM – 10:25 AM	NO CLASS: READING DAY
6-Oct	Friday	NO CLASS: HOMECOMING		13-Dec	WEDNESDAY	10:00 AM – 12:00 PM	EXAM 5
9-Oct	Monday	9:35 AM – 10:25 AM	CH 3, Class 3				
11-Oct	Wednesday	9:35 AM – 10:25 AM	CH 3, Class 4				
13-Oct	Friday	9:35 AM – 10:25 AM	CH 3, Class 5				
16-Oct	Monday	9:35 AM – 10:25 AM	CH 3, Class 6				
18-Oct	Wednesday	9:35 AM – 10:25 AM	CH 3, Class 7				
19-Oct	THURSDAY	6:15 PM – 8:15 PM	EXAM 3				
20-Oct	Friday	no class; read the entirety of chapter 4					