Basic Principles of Organic Chemistry CHM 5224, Fall Semester 2019

Instructor: Professor Alex Grenning

phone: 352-392-9131 | email: grenning@ufl.edu | Office: JHH 402 | Website: grenninglab.com | twitter: OChem_Grenning

When and Where:

- Classroom Location: LEI 0207. Lectures will be in person and broadcast over Zoom (subject to change)
- HyFlex Option: You can join the lecture on Zoom
 - o https://ufl.zoom.us/j/91317203789?pwd=Ujl1MS8xOVh1WWJ0WE9Bb2JJVS9DUT09
 - o Meeting ID: 913 1720 3789
 - o Passcode: UF_OChem!
- Classes/Lecture: M,W,F | Period 2 (8:30 AM 9:20 AM)
- 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 and Thursdays, 9:30 10:40 AM

Course Description:

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

<u>Course Content</u>: We will follow Grossman's textbook (See Required Texts) with significant embellishments 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
- Free radicals
- Chemistry of Transition Metals

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

Attendance: Attendance is required.

Required Texts:

• The Art of Writing Reasonable Organic Reaction Mechanisms, 2nd Ed., Robert Grossman, online edition available free of charge through the UF Library website. (http://tinyurl.com/hgregop)

Recommended Texts:

- Advanced Organic Chemistry, Part A, 5th Ed., Francis A. Carey and Richard J. Sundberg. Online edition available **free** of charge as a pdf through the UF Library website. (http://tinyurl.com/zvlnzxs)
- Modern Physical Organic Chemistry, Eric V. Anslyn and Dennis A. Dougherty (~\$110 online)
- Strategic Applications of Named Reactions in Organic Synthesis, Laszlo Kurti and Barbara Czako (~\$45 used online)

Exams and Grading:

Grading:

- There will be four exams through the semester. See the calendar below for details.
- Exams will be curved.
- Exam length and point value may vary.

Homework:

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

Other Policies:

Masks. The College of Liberal Arts and Sciences emphasizes that, in light of CDC recommendations, face coverings, though not required, are expected in all UF facilities, including your classrooms. Regardless of vaccination status, mask usage is a responsible and vital way of preventing transmission of COVID-19. Faculty may also ask for mask usage in their offices during one-on-one meetings (with a provision for remote office hour meetings as an alternative).

Vaccination. If you have not been vaccinated, please consider starting the process immediately. If you are currently at home, you can obtain a first dose where you are and receive a second dose here in Gainesville. If you are already in Gainesville, you can schedule a vaccination appointment at ONE.UF. Please keep in mind that being vaccinated for COVID-19 is the best way to protect yourself and others from the potentially life-threatening effects of the virus. Your action in this regard may help ensure the health and safety of yourself, your fellow CLAS students, and the faculty and staff with whom you interact.

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, the final exam score will count as the score for the missed 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	Topic for discussion	Date	Day	Time	Topic for discussion
23-Aug	Monday	8:30 AM	Chapter 1	18-Oct	Monday	8:30 AM	Chapter 4
25-Aug	Wednesday	8:30 AM	Chapter 1	20-Oct	Wednesday	8:30 AM	Chapter 4
27-Aug	Friday	8:30 AM	Chapter 1	22-Oct	Friday	8:30 AM	Chapter 4
30-Aug	Monday	8:30 AM	Chapter 1	25-Oct	Monday	8:30 AM	Chapter 4
1-Sep	Wednesday	8:30 AM	Chapter 1	27-Oct	Wednesday	8:30 AM	Chapter 4
2-Sep	Thursday	6:15 PM	Chapter 1 quiz	29-Oct	Friday	8:30 AM	Chapter 4
3-Sep	Friday	8:30 AM	no class the day after an exam	1-Nov	Monday	8:30 AM	Chapter 4
6-Sep	Monday	8:30 AM	NO CLASS: Labor Day	3-Nov	Wednesday	8:30 AM	Chapter 5
8-Sep	Wednesday	8:30 AM	Chapter 2	4-Nov	Thursday	6:15 PM	Chaper 4 Exam
10-Sep	Friday	8:30 AM	Chapter 2	5-Nov	Friday	8:30 AM	no class the day after an exa
13-Sep	Monday	8:30 AM	Chapter 2	8-Nov	Monday	8:30 AM	Chapter 5
15-Sep	Wednesday	8:30 AM	Chapter 2	10-Nov	Wednesday	8:30 AM	Chapter 5
17-Sep	Friday	8:30 AM	Chapter 2	11-Nov	Thursday	6:15 PM	NO CLASS: Veteran's Day
20-Sep	Monday	8:30 AM	Chapter 2	12-Nov	Friday	8:30 AM	Chapter 5
22-Sep	Wednesday	8:30 AM	Chapter 2	15-Nov	Monday	8:30 AM	Chapter 5
23-Sep	Thursday	6:15 PM	Chaper 2 Exam	17-Nov	Wednesday	8:30 AM	Chapter 5
24-Sep	Friday	8:30 AM	no class the day after an exam	18-Nov.	Thursday	6:15 PM	Chaper 5 Exam
27-Sep	Monday	8:30 AM	Chapter 3	19-Nov	Friday	8:30 AM	no class the day after an exa
29-Sep	Wednesday	8:30 AM	Chapter 3	22-Nov	Monday	8:30 AM	Chapter 6
1-Oct	Friday	8:30 AM	Chapter 3	24-Nov	Wednesday	8:30 AM	
4-Oct	Monday	8:30 AM	Chapter 3	25-Nov	Thursday	6:15 PM	NO CLASS: Thanksgiving
6-Oct	Wednesday	8:30 AM	Chapter 3	26-Nov	Friday	8:30 AM	
8-Oct	Friday	8:30 AM	NO CLASS: Homecoming	29-Nov	Monday	8:30 AM	Chapter 6
11-Oct	Monday	8:30 AM	Chapter 3	1-Dec	Wednesday	8:30 AM	Chapter 6
13-Oct	Wednesday	8:30 AM	Chapter 4	2-Dec	Thursday	6:15 PM	Chapter 6
14-Oct	Thursday	6:15 PM	Chaper 3 Exam	3-Dec	Friday	8:30 AM	Chapter 6
15-Oct	Friday	8:30 AM	no class the day after an exam	6-Dec	Monday	8:30 AM	Chapter 6
				8-Dec	Wednesday	8:30 AM	Chapter 6 exam