

Basic Principles of Organic Chemistry

CHM 5224, Fall Semester 2016

Instructor: Professor Alex Grenning, email: grenning@ufl.edu, room: SIS A328, website: grenning.chem.ufl.edu

When:

- *Classes/Lecture:* MWF Period 2, Leigh 0142 8:30 – 9:20 Aug 22nd – Dec. 7th 2016
- *Make Up Class or Optional Q&A:* Thursdays, Sisler 340, 6:15 – 7:15 PM
- *Exams 1 – 3:* Select Thursdays (see Dates, below), Sisler 340, 6:15 – 10 PM (no class Fridays after exams)
- *Final Exam:* During the scheduled final exam time: Friday Dec. 16th at 10 am, Sisler 340
- *Office Hours:* Tuesdays and Thursdays, 8:30 – 9:30 am, open door policy, & by appointment

Course Description, Required and Recommended Materials

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

Course Content: We will roughly be following Grossman's textbook (see below)

- *Review and introduction to synthesis-relevant physical organic chemistry principles*
- *Various reactions under acidic and basic conditions*
- *Pericyclic:* electrocyclizations, cycloadditions, sigmatropic rearrangements, and ene reactions
- *Introduction to transition-metal catalysis*

Teaching Philosophy: The course will be a blend of lectures (developed from the text books listed below) and interactive problem sets and Q&A.

Texts: Required

- *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>)
- *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>)

Texts: Recommended

- *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)

Assignments, Exams and Grading:

Assignments: Handed out on Fridays, due before the start of the next class (most commonly Mondays)

Grading:

- Assignments (lowest two dropped) 20% of overall grade (essentially one exam grade!)

- 4 Exams, $20\% \times 4 = 80\%$ of overall grade
- Grading will be done on a curve

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.

Other Policies:

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.

Calendar (Subject to Change)

No Class on UF sanctioned holidays.

Travel Days: There will be Thursday night make up classes for Alex's travel days. Q&A will follow directly after class.

22-Aug	E1.1	19-Sep	E2.1	17-Oct	E3.1	14-Nov	E4.1
24-Aug	E1.2	21-Sep	E2.2	19-Oct	E3.2	16-Nov	E4.2
26-Aug	E1.3	23-Sep	E2.3	21-Oct	E3.3	18-Nov	E4.3
29-Aug	E1.4	26-Sep	E2.4	24-Oct	E3.4	21-Nov	E4.4
31-Aug	E1.5	28-Sep	E2.5	26-Oct	E3.5	23-Nov	THX GVNG
2-Sep	TRAVEL DAY	Th 29-Sep	Make-up E2.6	28-Oct	E3.6	25-Nov	THX GVNG
5-Sep	Labor Day	30-Sep	E2.7	31-Oct	E3.7	28-Nov	E4.5
7-Sep	E1.6	3-Oct	E2.8	2-Nov	E3.8	30-Nov	E4.6
Th 8-Sep	Make-up E1.7	5-Oct	E2.9	4-Nov	E3.9	2-Dec	E4.7
9-Sep	E1.8	7-Oct	TRAVEL DAY	7-Nov	E3.10	5-Dec	E4.8
12-Sep	E1.9	10-Oct	E2.9	9-Nov	E3.11	7-Dec	E4.9
14-Sep	E1.10	12-Oct	E2.10	10-Nov	EXAM 3	16-Dec	FINAL EXAM!
Th 15-Sep	EXAM 1	13-Oct	EXAM 2	11-Nov	Vet's Day		
16-Sep	NO CLASS	14-Oct	Homecoming				