Class Number: 10786

Topics in Synthetic Organic Chemistry Fall 2023

Instructor:	Dr. Daniel Seidel, CCB 406-G, Phone: 4-7991, seidel@chem.ufl.edu
Class Meeting Time:	Tuesdays $5^{\text{th}}$ and $6^{\text{th}}$ period (11:45 am - 1:40 pm), SFH 421
Office Hours:	By appointment as needed.
Texts:	Current literature and monographs.
Grading:	Grades: assignments (70%), participation (15%), and attendance (15%) All final grade disputes must be addressed within 3 weeks of the end of the semester.

*Attendance*: Attendance at all class meetings is mandatory. You must notify me ahead of time if you will miss a class and an additional assignment will be made to excuse the absence.

*Course Objectives:* The objective of this course is to practice your presentation and problem-solving skills while examining synthetic strategies and methods you are interested in. Particular emphasis will be placed on "thinking on your feet" with the goal of preparing you for your oral qualifying examination.

*Prerequisites:* This course will examine modern synthetic strategies and it is expected that you have a thorough and highly advanced knowledge of synthetic methods. Typically, this course will be taken in the semester following completion of CHM 6226 (prerequisite).

*Homework*: The majority of your grade will be assigned based upon in-class presentations. It is expected that you complete these assignments outside of class and be able to present and discuss the material during our meetings.

*Projects*: Presentations on approved topics of your choosing.

**Online Course Evaluation:** At the end of the semester, you will have the opportunity to provide feedback through an online course evaluation. The information regarding this evaluation will be circulated by the Department of Chemistry when it becomes available.

*Classroom Etiquette:* I expect you to *be on time* and not cause any disturbances during the lectures. *Cell phone use and texting is strictly prohibited at all times.* Please silence your cell phone. No cell phones, text messaging, headphones, computers (except for presentations), or other electronic devices are to be used during any class meeting without special permission.

#### Classroom accommodation:

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.

#### Student Honor Code

*The UF Student Honor Code* (see the UF Student Guide [https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-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 submitted work 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."

Please note that violations of the Honor Code are taken seriously. Honor Code violations include copying on an exam (or helping another student to copy) and/or turning in an exam for re-grading that has been changed by a student since it was graded by the instructor.

### Topics in Synthetic Organic Chemistry Fall 2023

# Any student found responsible for an academic dishonesty violation in this course will automatically forfeit his/her right to the exam drop policy <u>and will be</u> recommended sanctions consistent with the offense.

#### An Examination of Modern Synthetic Methods

#### Tentative Schedule:

Tuesdays, Fall 2023	
8/29 - Seidel	Introduction
9/5 - Seidel	
9/12 - Seidel	
9/19 -	
9/26 -	
10/3 -	
10/10 -	
10/17 -	
10/24 -	
10/31 -	
11/7 -	
11/14 -	
11/21 -	
11/28 -	
12/5 -	

#### Topics

- Prepare a presentation for the assigned class meeting time using the current literature on the approved topic of your choice.
- Distribute a pdf of the slides to the class immediately after your presentation. While you may use a review article as source material, you must draw your own Figures for this presentation in ChemDraw (no copy/paste from the pdf or elsewhere).
- Prepare a problem based on your lecture. It must be of suitable complexity to work in class (not too easy or too hard). Include as the last slide of your presentation.
- Prepare a second problem to include on the problem set.

#### What's due:

- 1- Send a pdf of the presentation to the class (including instructor) by the end of the day you present.
- 2- Send a powerpoint file of the presentation to the instructor by the end of the day you present.
- 3- Send your problem set problem as a ChemDraw file to the instructor by the end of the day you present.

## \* Select two topics for selection/approval and email the instructor by 9/04. Please select a top choice and a second choice so that we can avoid potential overlap.

A note about topic selection: Be sure to select a topic with the correct amount of material to ensure a good presentation. For instance, a natural product with two- and three-step syntheses will likely not provide enough material to present a lecture on. Additionally, more is not necessarily better. For instance, if you were to try to comprehensively cover "photoredox catalysis," it would take more than the entire semester and you would be better off choosing a more narrowly focused topic.