Chemistry 426 Advanced Organic Chemistry Fall 2023

Instructor: Professor Chao Zhang

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Schedules: Lectures/Discussions: 9:30 – 10:50 am Tue/Thu, SGM226

Office Hours: 11:00–12:00 pm Tue (Zhang) or by appointment

Textbook: ADVANCED ORGANIC CHEMISTRY, PART B (5TH ED): Reactions and Synthesis, F. A.

Carey and R. J. Sundberg, 5th edition, Kluwer Academic/Plenum; Publishers, 2007.

ISBN 978-0-387-68354-6

COURSE OUTLINE:

1. Introduction

- 2. Alkylation
- 3. Additions to Carbonyl
- 4. Aldol and Related Reactions
- 5. Wittig-type Reactions
- 6. Oxidation & Reduction
- 7. Cycloadditions
- 8. Organometallic Reactions
- 9. Protections & Multistep Syntheses

Points: 2 Midterms

- 1) Thursday, September 30, 2021, 9:30 –11:00 am. (20%)
- 2) Thursday, November 18, 2021, 9:30 –11:00 am. (30%)

Homework (25%)

Presentation (25%), in the week of December 6, 2021

Attendance: Complete attendance is required. For special reasons including medical ones, notify the instructor as soon as possible.

Missed Exams: MAKE-UP EXAMS WILL NOT BE GIVEN. Any unexcused absence from an examination will result in a grade of zero points for that exam. It is the student's responsibility to inform the instructor potential conflict when choosing the exam dates.

Incompletes: The grade of "I" will be given only under exceptional circumstances, such as an extended illness, which can be certified by a practicing physician. To receive an incomplete grade, the student *must have a passing grade on all completed work up to that point.* Thus, students who are failing the course cannot request an incomplete. To remove an incomplete grade from the student's records, all requirements must be completed within one academic semester, otherwise the "I" will automatically be replaced with an "F".

Academic Dishonesty: CHEATING OR DISRUPTIONS IN THE CLASSROOM WILL NOT BE TOLERATED. Any attempts to cheat on examinations or assignments will result in a zero for that exam, and possibly an "F" for the course depending on the severity of the cheating.

COVID Policy: Students are expected to comply with all aspects of USC's COVID-19 policy. Failure to do so may result in removal from the class and referral to Student Judicial Affairs and Community Standards.

Please do not hesitate to e-mail the instructor if there are any questions or problems.