

# Chemistry 426

## Advanced Organic Chemistry

### Fall 201'

**Instructor:** Professor Chao Zhang

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**Lecture Schedule:** Lectures: 9:30 –10:50 am, T-Th, SGM 226  
Discussion: 2:00 –2:50 pm, T, GFS 205

**Office Hours:** Tuesdays, 4:00 to 5:00 pm, LJS 369

**TA:** Ying-Chu Chen

**Office:** LJS 370; **Tel:** 213-740-4972; **e-mail:** yingchuc@usc.edu

**Office Hours:** Wednesday, 2:30 to 3:30 pm, LJS 370

**Text:** 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. Alkylations.
3. Additions to Carbonyls.
4. Aldol and Related Reactions.
5. Wittig-type Reactions.
6. Oxidation & Reduction.
7. Cycloadditions & Sigmatropic Rearrangements.
8. Cationic Reactions.
9. Radical Reactions.
10. Organometallic Reagents.
11. Protections & Multistep Syntheses.

**Exams:** 3 Midterms (50%, the worst one will be dropped)

1, **Thursday, September 26, 2013.**

2, **Thursday, October 31, 2013.**

3, **Tuesday, December 3, 2013.**

Final (50%)

**Thursday, December 12, 2013, 11:00 am – 1:00 pm**