

Chemistry 342-Organic Chemistry II Summer 2015

Instructor: Dr. Rui Zhang **Classroom:** Snell 3107
Office: TCCW 443 **Meeting Time:** MTWF 9:00 am -12:00 am
Office Tel: 745-3803 **Office Hour:** Walk-in or by appointment
Email: rui.zhang@wku.edu **Text:** "Organic Chemistry, 11th edition" by Solomons
Supplemental Text: "ACS Organic Chemistry Exam (Study Guide)" and "Organic Chemistry (II) as a Second Language" by David R. Klein
Prerequisites: CHEM 340 with a grade of "C" or better. **Corequisites:** CHEM 343

Important Dates

Monday, July 6: Classes begin.

Friday, July 17, Last day to drop with a W. Last day to change a course from credit to audit.

Friday, July 31, 9 am-11:00 am: Final ACS Exam in Snell 3107.

Course Description: CHEM 342 is the second semester of a two-semester sequence, which will focus on providing broader insights into the reactions and mechanisms of organic compounds and their chemical reactivity. Fundamentals of general chemistry and organic chemistry, nomenclature, as well as spectroscopy methods will be reinforced.

Course Outline and Sequence

Chapter 10: Radical Reactions

Chapter 11: Alcohols and Ethers

Chapter 12: Alcohols from Carbonyl Compounds

Chapter 13: Conjugated Unsaturated System:

Chapter 14: Aromatic Compounds

Chapter 15: Reactions of Aromatic Compounds

Chapter 16: Aldehydes and Ketones: The Carbonyl Group

Chapter 17: Carboxylic Acid and Their Derivatives

Chapter 18: Reactions at the *alpha* Carbon of Carbonyl Compounds

Chapter 19: Condensation and Conjugate Additions of Carbonyl Compounds

Grading

This course will be graded on a *curve*. Approximate grade cut-offs will be announced after each exam. You will be graded on a relative, subjective scale in this course, and the points will be distributed as follows (subject to minor modification):

Homework (10 × 10)	100
Quiz Section (10 × 10)	100
Midterm Exams (4 × 100)	400
ACS Exam (mandatory)	100
Total	700 points

Exams: Midterm Exams 1 and 3 (1 hour test time) will be given at regular class meeting time in Snell 3107 on the following specified dates listed below. Exam 2 and 4 will be take-home. *The exam dates may be subject to change based on actual teaching pace.*

Examination Dates: Monday, July 13, Exam 1 (**Ch 10-12**); In class
Friday, July 17, Exam 2 (**Ch 13-15**); Take Home
Friday, July 24, Exam 3 (**Ch 16, 17**); In class
Thursday, July 30, Exam 4 (**Ch 18, 19**); Take Home
Friday, July 31, ACS Exam (**cumulative**)

No exams will be regraded during this semester and no partial credit will be given for questions of nomenclature and reaction. I will make every effort to ensure that your work is graded carefully and fairly, and that your scores are entered accurately in my records

Quizzes-10 quizzes will be given throughout the course. They will last only ca. 10 minutes. Quizzes will be administered either at the start of lecture or take-home format. There are no make up's for quizzes. **10-Points** may be earned for each quiz.

Extra Credit: Significant improvement (> 20 points) in the course of study, reflecting from your latest Test's score (10 points). Bonus questions (10 points) from each midterm exam.

Blackboard

We will use the Blackboard web-based system in the course. Teaching notes, tutorial materials, assignments, practice problems, answer keys, and grade distributions will be posted at that site in PDF files.

Attendance Policy

Poor attendance reflects a poor scholastic attitude. Excessive and non-excused absences (4 or more) will result in a **failing** grade. Three absences will drop your grade by one letter. A sign-in sheet will be passed around for your signature in each class. No excuse is accepted for more than four absences.

Study Tips

Because over 10 million organic compounds exist, memorizing the structure, properties, and reactivity of all of them would be almost impossible. Luckily, **a few** fundamental ideas underlie all organic reactions. By **understanding** these themes and trends (*not by memorizing them!*), you should be able to rationalize unfamiliar reactions and mechanisms through analogy.

- **Prepare for class!** Read the chapter scheduled to be covered before coming to lecture. Understanding will not occur on the first exposure to new material, therefore if the lecture presentation is your second sighting of the concepts, your understanding will be much better. You will also be prepared to ask questions about complex ideas.

- **Lectures are important!** Skipping lecture will guarantee failure. The lecture and the textbook serve complementary roles. The lectures are meant to highlight concepts, simplify difficulties and expand on implications. In lecture you should be attentive. A mature student will transcribe not only what the instructor writes on the board, but also what the instructor says.
- **Apply your knowledge!** Doing problems is the quickest way to discover whether your understanding is incomplete or incorrect.
- **Study regularly and actively!** Consistent study of chemistry is essential for success. Simply studying two days before the exam will make failure likely.
- **Ask questions!** There is no such thing as a bad question. You pay good money to attend this school, so take advantage of the instructor's understanding and availability.

Students with Disabilities:

In compliance with university policy, students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services in DUC A-200 of the Student Success Center in Downing University Center. Please DO NOT request accommodations directly from the professor or instructor without a letter of accommodation from the Office for Student Disability Services.

Although I will make every effort to follow this syllabus exactly, I reserve the right to make changes as I deem necessary throughout the course.
