

# ORGANIC CHEMISTRY II CHEM 342

Spring 2007

Lecture: TTh 5:30–6:45 pm in Chemistry, Room 16

First lecture: Jan 9 (T); Last lecture: April 19 (Th)

Last day to withdraw: Feb 26 (M)

Class will not meet on: March 13 (T), March 15 (Th)

**Instructor:** Dr. Michael H. Nantz  
852-8069; email: michael.nantz@louisville.edu  
Office hours: M 11:00 am – 12:30 pm in BRB, Room 345

**Teaching Assistant:** Mr. Samuel Asem; Office: Chemistry, Room 344  
852-6984; email: ssasem01@louisville.edu  
Office hours: M 1 – 2 pm and Th 3 – 4 pm

**Recitation Sections:** T 7:00–7:50 pm in Chemistry, Room 16  
Th 7:00–7:50 pm in Chemistry, Room 16

**Text:** *Organic Chemistry* by Joseph M. Hornback, 2<sup>nd</sup> Ed.

<i>Lecture Topics</i>	<i>Sections in Text</i>
Benzene and Aromatic Compounds	Chapter 16
Aromatic Substitution Reactions	Chapter 17
Additions to the C=O Group	Chapter 18
Reactions of Carboxylic Acids and Derivatives	Chapter 19
Enols and Enolate Anions	Chapter 20
The Chemistry of Radicals	Chapter 21
Synthetic Polymers	Chapter 24
Carbohydrates	Chapter 25
Pericyclic Reactions	Chapter 22
Organic Synthesis	Chapter 23

**Exam Schedule:** Exam I — Thursday Feb 1 (7 lectures), 100 pts  
Exam II — Thursday March 1 (7 lectures), 100 pts  
Exam III — Tuesday April 10 (8 lectures), 100 pts  
Final Exam — 5:30 pm – 8:00 pm on April 26 (Th), 200 pts

### Guidelines

**Grading:** Each hour Exam is worth 100 points; the Final Exam is worth 200 points. Your total course points will be computed by adding your two highest hour Exam scores to your Final Exam score (i.e., the total point accumulation for a perfect score in this course is 400 points).

NO EARLY, LATE OR MAKE-UP EXAMS WILL BE GIVEN.

The grading scale is as follows: A range (A+, A, A-) = 350–400 points; B range = 300–349 points; C range = 250–299 points; D range = 200–249 points; F = below 200 points.

### Course

**Prerequisite:** The prerequisite for CHEM 342 (second semester Organic Chemistry) is a passing grade in Organic Chemistry I (CHEM 341 or equivalent). CHEM 342 employs concepts covered in CHEM 341, so a thorough understanding of first-semester fundamentals, such as orbitals and bonding, acid-base chemistry, resonance, stereochemistry, nucleophilic substitution reactions, elimination reactions, and  $\pi$ -bond chemistry, is required.

### Course

**Goals:** (1) Understand how organic reactions are used to transform simple, commercially available starting materials into more elaborate target molecules such as medicines = organic synthesis; (2) understand how fundamental, classic organic reactions proceed = reaction mechanisms; and (3) understand the structures and syntheses of various natural and synthetic polymers.

### Academic

**Conduct:** The Codes outlined in the Student Handbook of the University of Louisville will be expected in this course. Penalties will apply in the event of cheating during examinations.