ORGANIC CHEMISTRY II
CHEM 342

Fall Semester 2016

Lecture: T & Th at 9:30 – 10:45 am in CB LL16

First lecture: Aug 23 (T); last lecture: Dec 6 (T)
Last day to withdraw: Oct 24 (M)
Class will not meet on: Oct 4 (T), Nov 8 (T), Nov 24 (Th)

Instructor: Dr. Michael H. Nantz
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Office hours: Mondays at 10:30 am – 12:30 pm in SRB, Room 345

Text: *Organic Chemistry* by Janice G. Smith, 5th Edition

*Lecture Topics**	*Section in Text*
Radical Reactions	Chapter 15
Conjugation, Resonance, and Dienes	Chapter 16
Benzene and Aromatic Compounds	Chapter 17
Reactions of Aromatic Compounds	Chapter 18
Carboxylic Acids — Acidity of RCO_2H	Chapter 19
Carbonyl Chemistry — R^-M^+ reagents, [O], [H]	Chapter 20
Aldehydes & Ketones — Nucleophilic Addition	Chapter 21
Carboxylic Acid Derivatives — Acyl Substitution	Chapter 22
C=O Compounds — α-Carbon Substitution	Chapter 23
The Aldol, Claisen & Michael Reactions	Chapter 24
Amines	Chapter 25
Carbohydrates	Chapter 28

Exam Schedule: Midterm Exam I — September 20 (T), 100 pts
Midterm Exam II — October 20 (Th), 100 pts
Midterm Exam III — November 22 (T), 100 pts
Final Exam — 8:00 – 10:30 am on December 12 (M), 150 pts

* tentative schedule; projected coverage of topics is based on class progress

Guidelines

Grading: Each Midterm Exam is worth 100 points; the Final Exam is worth 150 points. Your total course points will be computed by adding your two highest Midterm Exam scores to your Final Exam score (i.e., the total point accumulation for a perfect score in this course is 350 points).

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

The grading scale is as follows: A range (A+, A, A–) = 306–350 points; B range = 261–305 points; C range = 221–260 points; D range = 175–220 points; F = below 175 points.

Course Prereq: 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 functional groups, orbitals and bonding, acid-base chemistry (pK_a), resonance, stereochemistry, nucleophilic substitution reactions, elimination reactions, oxidation and reduction, and alkyl halide, alcohol and π-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.

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.

Title IX/Clery Act Notification

Sexual misconduct (including sexual harassment, sexual assault, and any other nonconsensual behavior of a sexual nature) and sex discrimination violate University policies. Students experiencing such behavior may obtain **confidential** support from the PEACC Program (852-2663), Counseling Center (852-6585), and Campus Health Services (852-6479). To report sexual misconduct or sex discrimination, contact the Dean of Students (852-5787) or University of Louisville Police (852-6111).

Disclosure to **University faculty or instructors** of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on campus, in a University-sponsored program, or involving a campus visitor or University student or employee (whether current or former) is **not confidential** under Title IX. Faculty and instructors must forward such reports, including names and circumstances, to the University's Title IX officer. For more information, see the Sexual Misconduct Resource Guide (online).