

**Chem 251**  
**Organic Chemistry I**  
**Summer, 2009**

Chem 251 is the first part of a two-semester survey of organic chemistry. It is an introduction to organic structures, reactions, and reaction mechanisms.

Prerequisite: Chem 112A

Credit: 3 units

**INSTRUCTOR**

Dr. Donna G. Friedman

Office: Lab Sciences 101

Office hours: Monday-Friday 10:45- 11:30 and by appointment

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**TEACHING ASSISTANT**

Guoxi Xu

Hours to be determined

**TEXTBOOKS**

L.G. Wade Jr., Organic Chemistry, Seventh Edition, Prentice Hall, 2010. (required)

J. W. Simek, Solutions Manual to accompany Organic Chemistry, Seventh Edition, Prentice Hall, 2010. (recommended)

Organic Chemistry Molecular Models (recommended)

All of the above are available at the Washington University bookstore.

**READING AND PROBLEM ASSIGNMENTS**

Students should read the assigned chapters in the textbook before coming to lecture. Soon after lecture, students should re-read the chapters, work the in-chapter problems, and work as many of the problems at the end of the chapters as possible.

A suggested list of problems will be assigned for each chapter. These problems will not be collected for grading as the answers to the problems may be found in the Solutions Manual.

## **COURSE OUTLINE AND TENTATIVE EXAM SCHEDULE**

Course material is divided into four major study units as outlined below. Students are responsible for reading and studying all assigned sections of the textbook unless otherwise instructed. The quantity of material to be learned in Chemistry 251 is too large to permit all of it to be covered in lecture. Lectures will focus on key ideas and material that requires the most emphasis and explanation.

Chapter 1 "Introduction and Review"  
Chapter 2 "Structure and Properties of Organic Molecules"  
Chapter 3 "Structure and Stereochemistry of Alkanes"  
**FIRST UNIT EXAM – June 16**

Chapter 4 "The Study of Chemical Reactions"  
Chapter 5 "Stereochemistry"  
Chapter 6 "Alkyl Halides: Nucleophilic Substitution and Elimination"  
**SECOND UNIT EXAM – June 23**

Chapter 7 "Structure and Synthesis of Alkenes"  
Chapter 8 "Reactions of Alkenes"  
Chapter 9 "Alkynes"  
**THIRD UNIT EXAM – June 30**

Chapter 10 "Structure and Synthesis of Alcohols"  
Chapter 11 "Reactions of Alcohols"  
Chapter 14 "Ethers, Epoxides, and Sulfides"  
**FOURTH UNIT EXAM – July 7**

Chapter 15 "Conjugated Systems, Orbital Symmetry, and Ultraviolet Spectroscopy"  
**COMPREHENSIVE FINAL EXAM – July 10**

## **EXAMS AND GRADING SYSTEM**

All exams will be held during normal class hours. The four unit exams and the comprehensive final exam will be weighted equally - each exam will constitute 20% of the final grade. The final exam is mandatory. There will be no make-up exams. However, if a situation should arise that prevents a student from preparing for or taking a unit exam, the student should contact the instructor as soon as possible, preferably before the exam. If the instructor deems it appropriate, the final exam score will substitute for that of the missed unit exam.

Letter grades will be assigned by the following scale with +/- cutoffs to be determined.

A	88% or greater
B	78% - 87%
C	68% - 77%
D	58% - 67%
F	57% or below

Last day to drop without a "W" - June 12

Last day to change grade option or withdraw – June 26