

CHEM 211: Organic Chemistry I, part 1

This course will provide students with a solid foundation in organic chemistry through a systematic study of the chemistry of carbon compounds, including alkanes, alkenes, alkynes, alkyl halides, and aromatic compounds. These compounds will be discussed in relation to appropriate concepts of structure and bonding, stereochemistry, transition state theory, mechanisms, resonance, and spectroscopy. The application of the above to synthetic organic chemistry will be emphasized. Considerations in biochemistry, medicine, and pharmacology will be made. The first semester will be concerned with structural bonding, stereochemistry, aliphatic compounds and mechanism. Connections between the fields of organic chemistry and biochemistry, medicine, and pharmacology will be also highlighted.

This is the first part of a two-part course. Registration is required separately for each part of the course.

Learning Objectives

- Draw and interpret chemical structures
- Predict chemical properties based on structural information
- Predict products for chemical reactions
- Draw mechanisms for chemical transformations

Credits: 2

Class Type: Graduate Course

Prerequisites:

CHEM 102

CHEM 104

The above course(s) or equivalent. Solid understanding of general chemistry or permission from the instructor.

Program: Biochemistry, Chemistry, Pharmacology, and Toxicology