

# CHEM& 241 : Organic Chemistry I

**Credits** 4

First course for students planning to take three quarters of organic chemistry. Structure, nomenclature, reactions, and synthesis of the main types of organic compounds. No organic laboratory accompanies this course. This class may include students from multiple sections. (Elective)

**Prerequisites**

2.0 or higher in [CHEM& 163](#)

**Course Outcomes**

Understand structure and bonding in organic compounds including concepts of molecular hybridization theory, charge distribution, resonance, and stereochemistry.

Be able to name/recognize the functional groups associated with organic compounds; apply the rules of organic nomenclature.

Use knowledge of acid/base theory, electronic effects and steric effects to predict/explain reactivity of organic compounds.

Use knowledge of intermolecular forces to predict/explain physical properties of organic compounds.

Apply knowledge of acid/base theory, electronic effect and steric effects to propose reasonable mechanisms for reactions.

Apply knowledge of reaction mechanisms for nucleophilic substitution, elimination, and addition reactions to predict/explain the outcome of a reaction.