

Course Outcome Guide (COG)

Course:	CHEM 241 L/L: Organic chemistry I	Credits:	5	Date updated:	11/19/15
Course Description:	First semester of a two-semester sequence in organic chemistry, designed for science and pre-professional students. Covers structure and bonding, nomenclature, stereochemistry, functional groups, and acid-base properties of the basic classes of organic compounds.				
Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes		
			Course	General Education or Program	Institutional
<ul style="list-style-type: none"> • General chemistry concepts • Structures and properties • Basic organic classes: alkanes, alkenes, alkynes, alkyl halides, and alcohols. • Organic reactions • Stereochemistry • Data collecting, recording, and analyzing 	<ul style="list-style-type: none"> • Relate concepts from general chemistry to organic compounds. • Infer how structures of compounds relate to their properties. • Classify organic compounds • Predict the products of organic reactions. • Describe stereochemistry and chirality in organic. • Demonstrate ability to follow directions. • Collect data and explain deviations from expectations. 	<ol style="list-style-type: none"> 1. Fill in lab reports 2. Homework assignments 3. Chapter quizzes 4. Unit Exams 5. Comprehensive final exam 	Students will be able to: <ol style="list-style-type: none"> 1. Explain chemical structure and bonding in Organic Chemistry. 2. Analyze the structure, properties, and chemical reactivity of the basic classes of organic compounds: alkanes, alkenes, alkynes, alkyl halides. 3. Discover the basics of stereochemistry, including chirality. 	Students will: <ol style="list-style-type: none"> 2. Use reasoning skills to analyze and solve problems. 	Students will: <ol style="list-style-type: none"> 2. Use reasoning skills to analyze and solve problems.