Course Outcome Guide (COG)

Course:	CHEM 242 L/L: Organic chemistry II	**Credits:**	5	**Date updated:**	11/19/15
Course Description:	Second semester of a two-semester sequence. Structure and reactivity, name reactions, carbon-carbon bond formation reactions, aromatic and heterocyclic chemistry, multi-step synthesis, and polymers.				

Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes		
			Course	General Education or Program	Institutional
• Spectroscopy (IR, MS, NMR) • Properties and reactions of: ethers, aromatic, ketones, aldehydes, amines, and carboxylic acids and their derivatives. • Data collecting, recording, and analyzing	• Analyze spectra to identify an organic compound. • Distinguish organic classes based on properties. • Predict the products of organic reactions. • Demonstrate ability to follow directions. • Collect data and explain deviations from expectations.	1. Lab notebook 2. Homework assignments 3. Chapter quizzes 4. Unit Exams 5. Comprehensive final exam	Students will gain: 1. An understanding of spectrometric techniques for the determination of organic structures. 2. A detailed understanding of the structure, properties, and chemical reactivity of aromatic compounds, ethers, aldehydes, ketones, carboxylic acids, and amines. 3. Further familiarity with equipment and techniques of an organic chemistry laboratory.	Students will: 2. Use reasoning skills to analyze and solve problems.	Students will: 2. Use reasoning skills to analyze and solve problems.