

Course Outcome Guide (COG)

Course:	CHEM 122 L/L: General chemistry II	Credits:	5	Date updated:	11/19/15
Course Description:	A beginning science majors course covering topics in solutions, physical states, reaction rates and mechanisms, chemical equilibrium, electrochemistry, and thermochemistry.				
Concepts and Issues	Process Skills	Assessment Tasks	Intended Outcomes		
			Course	General Education or Program	Institutional
<ul style="list-style-type: none"> • Intermolecular forces • Solutions • Kinetics • Equilibrium • Acid-base equilibrium • Thermodynamics • Electrochemistry • Nuclear chemistry • Coordination compounds • Data collecting, recording, and analyzing 	<ul style="list-style-type: none"> • Identify IMFs present. • Predict changes from solution formations. • Calculate kinetics for different reactions. • Describe effects of equilibrium on reactions. • Compute pH of solutions. • Predict reaction properties from calculations. • Illustrate how electrolytic cells work. • Identify types of radiation and their effects. • Recognize coordination complexes and relate to the color of a solution. • 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. Develop a mastery of fundamental concepts and applications of chemistry. 2. Solve chemical problems and understand concepts. 	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.