
Course Description:

grade of C or higher. Part II of II. This is a Passport and UCGS transpoThe general purpose of this course is to through development of: skills in problem solving and in critical thinking, an un the methods of scientific inquiry, and an understanding of the general concepts chemistry.

Course Prerequisites/Co-requisites:

CHM 111 in a grade of C or higher and MTH 161 or higher

Course Objectives:

Upon completing the course, the student will be able to:

Liquids and Intermolecular Forces

- Explain and predict the properties of liquids. Perform phase change calculations. Draw and interpret phase diagram and perform vapor pressure calculation. Identify the type of solid.
- Solution
- Explain and predict the properties of solutions, including: solubility of gases in liquids, solubility of liquids in liquids and solids in liquids. Perform calculations using different units of concentration. Explain colligative properties and apply the equation for colligative properties.

Kinetics

- Apply concepts in Kinetics: explain and do calculations using the rate laws, the integrated rate laws and the Arrhenius equation. Understand reaction order, collision theory reaction mechanisms and catalysis.

Chemical Equilibrium

Recognize dynamic Chemical Equilibrium: Apply the law of mass action to homogeneous and heterogeneous equilibria. Perform equilibrium calculations. Apply Le Chatelier's Principle.

Acids/bases and solubility

Recognize and predict the properties of a solution. Write reaction for acid/base

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