

CHEM 1072 General chemistry

Course Description:

CHEM 1072 is intended to introduce students to the study of chemistry by building concepts and skills related to investigating the structure and nature of matter, and its potential for change. This course is designed for science and engineering students with no or little background in chemistry. The student will learn basic characteristics of matter, atomic structure and bonding, the principles of chemical nomenclature and stoichiometry, fundamental energy concepts, equilibrium, acid and base, and a brief introduction to organic chemistry and biochemistry. This course will help students to prepare themselves for further study of the general chemistry including CHEM 1070 and CHEM1280.

Main Course Outline (for reference only):

1. Matter and Measurement
2. Atoms, Molecules and Ions
3. Electronic structures of Atoms
4. Periodic properties of the elements
5. Stoichiometry of chemical reactions
6. Chemical Kinetics
7. Chemical equilibrium
8. Acid-base equilibria
9. Additional aspects of aqueous equilibria
10. Brief introduction to chemical bonding