

CHEM 1070 Principles of Modern Chemistry

Course Description:

CHEM 1070 is a three-credit course that consists of three lectures and one tutorial class per week. This is an introductory course for students with a *good* background in HKDSE chemistry. CHEM 1070 is designed to help students review the basics and build the confidence required to succeed before entering the mainstream courses.

Main Course Outline (for reference only):

1. Introduction: Matter and Measurement
2. Atoms, Molecules and Ions
3. Basic Concepts of Chemical Bonding
4. Reaction Stoichiometry
5. Reactions in Aqueous Solution
6. Electronic Structure of Atoms
7. Periodic Properties of the Elements
8. Molecular Geometry and Bonding Theories
9. Gases, Liquids, Solids and Modern Materials
10. Thermochemistry and Chemical Thermodynamics
11. Chemical Equilibrium and Acid-Base
12. Electrochemistry
13. Chemical kinetics