

CHEMISTRY (CHEM)

CHEM 1010 - Gen Chemistry I NonScience Mjr (3 Credit Hours)

The first of a two semester sequence covering the following general topics: metric and temperature conversions, density, calorimetry, mixtures/compounds/elements, chemical and physical properties, structure of the atom and electron configuration, periodic table, bonding, chemical formulas and nomenclature, moles, stoichiometry, chemical reactions, gas laws, and properties of gases, liquids and solids.
Co-requisite(s): MATH 1005, MATH 1015, MATH 1500, MATH 1500A
(3/0/3)

CHEM 1015 - Gen Chem I Lab Non Science Maj (1 Credit Hour)

A series of laboratory experiments designed to illustrate the material studied in Chemistry 1010 covering such topics as density determination, chromatography, calorimetry, emission spectra, gas laws, chemical changes and data collection.
Co-requisite(s): CHEM 1010
(0/1/1)

CHEM 1020 - Chemistry II NonScience Mjr (3 Credit Hours)

The second of a two course lecture sequence in Introductory Chemistry for non-science majors. The topics to be covered include the kinetic molecular theory of gases, intermolecular forces, colligative properties, chemical equilibrium, oxidation and reduction with selected topics in radioactivity and nuclear chemistry, organic chemistry, and biochemistry. The course emphasizes understanding basic principles and problem solving.
Prerequisite(s): CHEM 1010 or CHEM 1100
(3/0/3)

CHEM 1100 - Gen Chemistry I (Sci Majors) (3 Credit Hours)

First semester chemistry course designed for natural engineering or life sciences majors. Topics include nomenclature, atomic and molecular structure, chemical equations and stoichiometry, and gas laws.
Prerequisite(s): MATH 1005 or MATH 1015
Co-requisite(s): CHEM 1115
(3/0/3)

CHEM 1115 - Gen Chemistry I Lab (1 Credit Hour)

This laboratory course is designed to illustrate the material studied in CHEM 1100. Students will participate in experiments that involve mass/volume measurement and relationships, yield and stoichiometry, calorimetry and thermochemistry, and the manipulation and measurement of gases.
Co-requisite(s): CHEM 1100
(0/1/1)

CHEM 1200 - Gen Chemistry II (Sci Majors) (3 Credit Hours)

Second semester chemistry course designed for natural engineering or life sciences majors. A continuation of CHEM 1100 required of all chemistry and physics majors and other programs whose curricula require chemistry above the introductory level.
Prerequisite(s): CHEM 1100
(3/0/3)

CHEM 1215 - Gen Chemistry II Lab (1 Credit Hour)

This laboratory course is designed to illustrate materials studied in CHEM 1200. Experimental methods include quantitative, gravimetric and volumetric analysis, electrochemistry, plus kinetics with computer analysis of experimental data.
Prerequisite(s): CHEM 1115
Co-requisite(s): CHEM 1200
(0/1/1)