

CHEM 1411 General Chemistry I

Four semester hours(3-3)

Lecture: Fundamentals of Chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry.

Lab: Basic laboratory experiments supporting theoretical principles presented during the lecture component; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports.

Pre-requisite: One year of high school chemistry or CHEM 1405 or equivalent and College Algebra or equivalent academic preparation. (4005015403)

CHEM 1412 General Chemistry II

Four semester hours(3-3)

Lecture: Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry.

Lab: Basic laboratory experiments supporting theoretical principles presented in lecture component; introduction of the scientific method, experimental design, chemical instrumentation, data collection and analysis, and preparation of laboratory reports.

Pre-requisite: CHEM 1411. (4005015703)