Chemistry (CHEM)

CHEM 001A General Chemistry I (5)

Class Hours: *54 Lecture | 108 Laboratory*
Prerequisite(s): *MATH 063 or MATH 064*
Transfers to: *UC/CSU*

General Chemistry I

CHEM 001A is the first semester of a one-year course in chemistry intended for majors in the natural sciences (chemistry, biochemistry, biology, physics, pre-medicine), mathematics, and engineering.

CHEM 001B General Chemistry II (5)

Class Hours: *54 Lecture | 108 Laboratory*
Prerequisite(s): *CHEM 001A*
Transfers to: *UC/CSU*

General Chemistry II

CHEM 001B is a continuation of the study of the principles of chemistry with an emphasis on chemical thermodynamics (H, S, G), kinetics and mechanisms, equilibrium, electrochemistry, spectroscopy, nuclear chemistry, introductory organic and biochemical systems, and selected elemental chemistries of metals, non-metals, and metalloids. The laboratory includes lecture-matched qualitative and instrumental evaluation of selected species and parameters as well as microprocessor and computerized data gathering, processing and reduction, and computer simulations. Appropriate training in chemical safety is provided. (AA, CSU, UC) The Chemistry 001A, 001B sequence is required of all students majoring in chemistry, chemical engineering, engineering sciences, biology, microbiology, and all applied sciences at the University of California, i.e., medicine, pharmacy, veterinary science, nursing, home economics, etc. These courses are acceptable for credit at the University of California and California State University.

CHEM 002A Introductory Chemistry (4)

Class Hours: *54 Lecture | 54 Laboratory*
Prerequisite(s): *MATH 063 or MATH 064*
Transfers to: *UC/CSU*
C-ID: *CHEM 101*

Introductory Chemistry

CHEM 002A is a study of the applied principles of chemistry for the allied science and non-science majors. Included are scientific methodology, composition of matter, physical and chemical changes, bonding, nomenclature, chemical periodicity and reactivity, stoichiometry, states of matter, atomic and molecular modeling, chemical energetics, properties and models of solids, liquids, gases, aqueous solution and Redox reactions, pH, reactions of elements/acids/bases/salts, and a brief introduction to organic chemistry. Appropriate raining in chemical safety is provided.