CSU The California State University

General Chemistry for Science Majors Sequence, with Lab
TCSU CHEM SEQ A

A. Description
A one-year course in chemistry intended for majors in the natural sciences (chemistry, biochemistry, biology, physics, pre-medicine), mathematics, and engineering.

B. Recommended Preparation
None specified

C. Prerequisites
None specified

D. Minimum Unit Requirement
10 semester units, including at least 6 units of lecture, 2 units of laboratory, and 2 additional units of laboratory/recitation (at least 76 hours of lecture and 76 hours of laboratory)

E. Course Topics
The complete one-year course will present fundamental principles and concepts of chemistry including, but not limited to atomic structure, quantum theory, periodic properties, chemical reactions, stoichiometry, gas laws and theories, molecular structure and bonding, states of matter, solutions, acids and bases, chemical equilibrium, thermodynamics, oxidation-reduction, electro-chemistry and chemical kinetics, nuclear chemistry, organic chemistry, descriptive chemistry, and coordination chemistry. The laboratory sequence will support the above topics including both qualitative and quantitative experiments, analysis of data and error propagation.

F. Student Learning Outcomes
The American Chemical Society (ACS) General Chemistry Guide and the General Chemistry examinations provide information on topics and indicate an appropriate level of this sequence of courses, including learning goals and objectives.

G. CAN Equivalent
CAN CHEM SEQ A (Equivalency ends Fall 2009)