CHEM R110—Elementary Chemistry  5 units
Prerequisites: MATH R011 or 1 year high school algebra or equivalent.
4 hours lecture, 3 hours lab weekly
This is an introductory course in chemistry stressing basic principles of atomic and molecular structure, periodic table and states of matter, as well as quantitative techniques involved in elementary chemical calculations; there is some discussion of nuclear, organic, and biochemistry. The course serves as an introduction to lab techniques with experiments illustrating principles covered in lectures. Field trips may be required. (2)
Transfer credit: UC, CSU

CHEM R112—Elementary Organic and Biological Chemistry  5 units
Prerequisites: CHEM R110.
4 hours lecture, 3 hours lab weekly
This course is a continuation of CHEM R110. CHEM R112 includes equilibrium, oxidation-reduction, simple electrochemistry, and radioactivity. The major emphasis will be on organic chemistry. The section of organic chemistry includes: naming; structure and bonding; classification by functional groups and reactions; polymerization; optical isomerism; physical properties based on molecular polarity. Biochemistry may include carbohydrates, proteins and amino acids, fats, enzymes, DNA and RNA, and cell biochemistry. The lab illustrates the principles covered in the lecture. Field trips may be required. (2)
Transfer credit: UC, CSU

CHEM R120—General Chemistry I  5 units
Prerequisites: CHEM R110 or high school chemistry, and MATH R014.
3 hours lecture, 6 hours lab weekly
This course studies fundamental principles and theories of chemistry with special emphasis on calculations of solution chemistry, stoichiometry, chemical equilibrium and oxidation-reduction; includes discussion of quantum mechanical model of the atom, kinetic-molecular theory, and periodic table. Lab is designed to develop quantitative relationships through experiments, and to introduce inorganic preparative techniques and computer analysis of data. Field trips may be required. (2)
Transfer credit: UC, CSU

CHEM R122—General Chemistry II  5 units
Prerequisites: CHEM R120.
3 hours lecture, 6 hours lab weekly
CHEM R122 is a continuation course of CHEM R120 with emphasis on solution equilibria, kinetics, electrochemistry, radiochemistry, transition metal chemistry, and descriptive chemistry of the elements. Lab work includes qualitative analysis, thermochromics, and kinetic studies, and further develops inorganic preparative techniques. Computers are utilized for data acquisition and interpretation. Field trips may be required. (2)
Transfer credit: UC, CSU

CHEM R130—Organic Chemistry I  5 units
Prerequisites: CHEM R120 and CHEM R122.
3 hours lecture, 6 hours lab weekly
CHEM R130 studies the fundamental principles of organic chemistry with the emphasis upon practical application of modern principles to functional groups, reactivity, physical properties, and methods of synthesis of organic compounds. The lab portion of the course will give concrete examples of lecture materials. Field trips may be required. (2)
Transfer credit: UC, CSU

CHEM R132—Organic Chemistry II  5 units
Prerequisites: CHEM R130.
3 hours lecture, 6 hours lab weekly
CHEM R132 is a continuation course of CHEM R130 with emphasis on oxygen-containing and nitrogen-containing organic substances, polymers, carbohydrates, proteins, lipids, and other biomolecules. The lab will involve multiple-step synthesis from smaller molecules to larger molecules. Field trips may be required. (2)
Transfer credit: UC, CSU

CHICANA/O STUDIES

CHST R101—Introduction to Chicana/o Studies  3 units
3 hours lecture weekly
This is an introductory interdisciplinary course designed to familiarize students with various historical, cultural, sociological, and political issues affecting the Chicana/o experience in the United States. The course introduces students to research and publications in related disciplines and familiarizes them with the interdisciplinary aspects of Chicana/o Studies. The course also includes themes and methodologies from related disciplines (history, anthropology, sociology, psychology, and political science). Field trips may be required.
Transfer credit: UC, CSU

CHST R107—History of Mexicans in the United States  3 units
3 hours lecture weekly
This course is a historical survey of the Mexican/Chicano experience from the pre-Columbian period to the present. The emphasis is on Mexican settlement of Greater Mexico and the Southwest United States within the broader history of the United States. In the process, the course covers significant events in the historical development of the United States and Mexico—the colonial era, the early National period, the westward (and northward) movement of people across America in the last 150 years, and U.S.-Mexico relations in the 19th and 20th centuries. The course satisfies degree requirements in American institutions. Field trips may be required. (Same as HIST R107) (2)
Transfer credit: UC, CSU

CHST R114—Psychological Issues of the Mexican People in the Southwest  3 units
3 hours lecture weekly
Course analyzes experiences of people of Mexican descent living in the Southwest from a psychological perspective. Examines nature of individual and group conflict, explores problems of social participation in a dominant culture and its psychological implications. Course describes emergence of distinctive identities of people of Mexican descent. (Same as PSY R114)
Transfer credit: UC, CSU