

CHEMISTRY (CHEM)

CHEM G110 5 Units (72 lecture hours; 72 lab hours)

Introduction To Chemistry

Prerequisite(s): Course taught at the level of intermediate algebra or appropriate math placement.

Grading Mode: Standard Letter

Transfer Credit: CSU; UC: Credit Limitations: CHEM G110 and CHEM G130 combined: maximum credit, 1 course; No credit for CHEM G110 or CHEM G130 if taken after CHEM G180.

This course provides an introduction to some of the basic principles of inorganic, organic and biochemistry. Lectures, demonstrations and laboratories are integrated into a learning system equivalent to three hours lecture, four hours lecture-laboratory a week. Graded. **C-ID:** CHEM 101; CHEM 102.

CHEM G130 4 Units (54 lecture hours; 72 lab hours)

Preparation for General Chemistry

Prerequisite(s): Course taught at the level of intermediate algebra or appropriate math placement.

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU; UC: Credit Limitations: CHEM G110 and CHEM G130 combined: maximum credit, 1 course; No credit for CHEM G130 if taken after CHEM G180.

This course is an introduction to the principles and calculations of chemistry and practice in basic laboratory techniques. It is designed specifically for students planning to take CHEM G180 (General Chemistry A). Graded or Pass/No Pass option. **C-ID:** CHEM 101.

CHEM G180 5 Units (54 lecture hours; 126 lab hours)

General Chemistry A

Prerequisite(s): Course taught at the level of intermediate algebra or appropriate math placement and CHEM G130 or achieve qualifying score on Chemistry Placement.

Grading Mode: Standard Letter

Transfer Credit: CSU; UC.

This course is the first in a two-semester general chemistry sequence intended for majors in science and engineering. It examines the composition, properties, and transformations of matter. The laboratory portion of this course provides a hands-on examination of these concepts. Graded. **C-ID:** CHEM 110, 120S.

CHEM G185 5 Units (54 lecture hours; 126 lab hours)

General Chemistry B

Prerequisite(s): CHEM G180.

Grading Mode: Standard Letter

Transfer Credit: CSU; UC.

This course is the second in a two-semester general chemistry sequence intended for majors in science and engineering. It provides an introduction to kinetics, principles and types of chemical equilibria, acids and bases, thermochemistry, electrochemistry, coordination compounds, nuclear chemistry and nomenclature of organic compounds. Graded. **C-ID:** CHEM 120S.

CHEM G220 5 Units (54 lecture hours; 126 lab hours)

Organic Chemistry A

Prerequisite(s): CHEM G185.

Grading Mode: Standard Letter

Transfer Credit: CSU; UC.

This course is the first in a two-semester organic chemistry sequence. It involves a study of the compounds of carbon and their reactions with an emphasis on structure/reactivity relationships and mechanisms. The laboratory emphasizes standard organic chemistry techniques, investigations, and spectroscopic methods for identification. Graded. **C-ID:** CHEM 150, 160S.

CHEM G225 5 Units (54 lecture hours; 126 lab hours)

Organic Chemistry B

Prerequisite(s): CHEM G220.

Grading Mode: Standard Letter

Transfer Credit: CSU; UC.

This course is the second in a two-semester organic chemistry sequence. It involves a continuation of the study of the compounds of carbon and their reactions with an emphasis on structure/reactivity relationships and mechanisms, including chemistry of carbonyl compounds, aromatic compounds and molecules of biological importance. The laboratory includes reactions and workup design, separation and identification of an unknown mixture, multistep synthesis and additional spectroscopy. Graded. **C-ID:** CHEM 160S.