Chemistry

Chemistry (CHEM) Classes

CHEM043G : Developmental Chemistry

This high school-level course in chemistry examines the structure of matter and the nature of chemical reactions. Particular attention will be given to the types of reactions that apply to the health field. These credits do not count toward graduation requirements.
Credits 3
Theory Hours 3

Lab Hours 0
Semester Offered
Fall/Spring semesters

CHEM110G : Introduction to Chemistry

This introductory course covers the fundamental principles of chemistry including measurements, atomic structure, periodic trends, names and formulas of compounds, chemical reactions and bonds, acids, bases and solutions: stoichiometry, gas laws, and radiation chemistry. It is designed for students who have had no instruction or limited instruction in chemistry. The course is for the student whose chemistry requirements will have been fulfilled upon completion of this course. It satisfies the needs of the health sciences and related fields as well as the needs for the student who is preparing for further study in chemistry.
Credits 4
Theory Hours 3

Lab Hours 3
Corequisites
MATH145G/147G or MATH150G/152G, or sufficient Placement Scores. This course is not intended to be a prerequisite for CHEM115G
Semester Offered
Fall/Spring semesters

CHEM115G : General Chemistry I

The objective of the chemistry course is to introduce the student to the principles of chemistry included in the first semester of a two-semester chemistry course. The course will include topics such as components of matter, stoichiometry, chemical reactions, gas and kinetic-molecular theory, thermochemistry, quantum theory and atomic structure, chemical periodicity, chemical bonding, and molecular geometry. Principles taught in lectures will be reinforced in laboratory experiments.
Credits 4
Theory Hours 3

Lab Hours 3
Prerequisites
CHEM043G or High School Chemistry (or CHEM110G)
Corequisites
MATH145G/147G or MATH150G/152G, or higher

Semester Offered
Fall/Spring semesters

CHEM116G : General Chemistry II

This general chemistry course is designed to introduce the student to the principles of chemistry included in the second semester of a two-semester chemistry course. This course will include topics such as intermolecular forces, properties of solutions, kinetics, chemical equilibrium, acid-base equilibrium, electrochemistry, and thermodynamics.
Credits 4
Theory Hours 3

Lab Hours 3
Prerequisites
MATH150G/152G or higher or permission of department chair and CHEM115G (C or better)
Semester Offered
Fall/Spring semesters

CHEM200G : Organic Chemistry

This course will provide an introduction to the properties and reactions of hydrocarbons and their oxygen and nitrogen derivatives. Special emphasis will be placed on the application in biotechnology and related fields. Laboratory experiments will reinforce class lecture where possible.
Credits 4
Theory Hours 3

Lab Hours 3
Prerequisites
CHEM115G (C or better) and CHEM116G (C or better)
Semester Offered
Fall semester

CHEM205G : Biochemistry

This comprehensive, introductory level class emphasizes cellular metabolism, and covers the structure and function of the four major classes of biological macromolecules: proteins, nucleic acids, carbohydrates, and lipids. Laboratory exercises will reinforce theoretical concepts presented in the lecture portion of the course.
Credits 4
Theory Hours 3

Lab Hours 3
Prerequisites
BIOL108G, CHEM115G (C or better), and CHEM116G (C or better)
Semester Offered
Spring semester