CHEMISTRY (CHMU)

CHMU 101 Introduction to Chemistry

An introductory chemistry course for non-science majors. Introduces the fundamental concepts of general chemistry (scientific notation, atomic structure, elements and compounds, phases and properties of matter, chemical reactions and equilibrium) as well as standard laboratory procedures. No previous chemistry background required. (Not offered in 2023-2024) 4 credits.

CHMU 102 Principles of Chemistry

Presents an introduction to chemistry and chemical laboratory techniques covering the basic principles and applications of chemistry. Designed for general education and students in programs that require a chemistry background. Topics include metric and English conversions, atomic theory, solution preparation and their properties, chemical reactions, inorganic chemical nomenclature, bonding, periodic table, mass relationships and acid/base theory. This course is only offered through the School of Extended Education. 3 credits.

CHMU 102L Principles of Chemistry Laboratory

This is the laboratory part of Principles of Chemistry and is taken in conjunction with the lecture course. An introduction to common laboratory techniques and the process of science is presented. The laboratory experiments are designed to complement the topics presented in the companion lecture course. Topics include density, osmotic pressure, chemical nomenclature, determining chemical change, titration, nuclear chemistry, and entropy. This course is only offered through the School of Extended Education. 1 credit.

CHMU 110 Introductory Organic and Biochemistry

A course demonstrating the basic elements of organic and biochemistry. Topics covered include the structure and function of essential biomolecules (proteins, enzymes, carbohydrates, lipids and nucleic acids) in relationship to biological and metabolic processes. Other topics include basic biology and chemistry, states of matter, bonding theory, solutions, acids, buffers, and pH, structure of biomolecules, membrane transport, metabolism of organic and biomolecules, biochemical energy, DNA processes and gene expression. This course is intended to be an introduction to basic organic chemistry and biochemistry for healthcare majors. Students will learn to relate organic chemistry to biochemistry which involves the study of reactions and processes that happen inside living organisms. This course is only offered through the School of Extended Education. 3 credits.

CHMU 110L Introductory Organic and Biochemistry Laboratory

This is the lab for Introductory Organic and Biochemistry and is to be taken concurrently with the CHMU 110 lecture course. This lab will introduce common laboratory techniques and the process of scientific experimentation. The laboratory experiments are designed to complement the topics presented in the companion lecture course. Topics include organic compounds, structural isomers, properties of carbohydrates, lipids and proteins, titration, crystallization, synthesis of fragrant esters, properties of enzymes, DNA and forensics. The laboratory component of this course is delivered using downloadable labs and simulations. This course is only offered through the School of Extended Education. 1 credit.