

CHEM125C : Introduction to General, Organic, and Biochemistry

Designed for students who need an introductory chemistry course that covers the fundamentals across inorganic, organic, and biological chemistry. This course focuses on the chemistry and chemical processes that operate in living systems. Topics will include physical and chemical properties of matter, chemical bonding, solutions, acids and bases, the properties and naming of organic compounds, metabolic pathways, and energy production. Appropriate lab experiments will complement the lectures.

Credits 4

Lab/Practicum/Clinical Hours 2

Lecture Hours 3

Prerequisites

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

high school Chemistry with lab or permission of the department chair

Learning Outcomes

Upon completion of this course, students will:

1. Use the periodic table of the elements.
2. Explain physical and chemical properties of matter, chemical bonds, and reactions.
3. Discuss the principles of organic nomenclature and stereoisomerism.
4. Describe structures, functions, and metabolism of the major classes of biomolecules.
5. Compare and contrast the types of reactions most commonly seen in biological systems.