CHEM105C : Chemistry

Introductory and cursory course in which the fundamental principles of chemistry are developed. Included are topics in atomic structure, chemical bonding, electronic configuration, the Periodic Table, stoichiometry, solutions, gases, and acid-base chemistry. Appropriate lab experiments will complement the lectures. This course is not meant as a substitute for either CHEM 103C or CHEM 104C. High school chemistry with lab strongly recommended.

Credits 4

Lab/Practicum/Clinical Hours 2

Lecture Hours 3

Recommended Prerequisites

- High school chemistry with lab with strongly recommended.

Prerequisites

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

- The MATH124C pre- and corequisite can be any higher-level MATH course, excluding MATH130C, MATH151C, MATH215C, and PHIL112C.

MATH124C

Corequisite Courses

MATH124C

Corequisites

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Learning Outcomes

Upon completion of this course, students will:

1. Apply the scientific method.
2. Demonstrate proper laboratory techniques and skills.
3. Employ mathematical concepts to manipulate chemical data.
4. Use the periodic table of the elements.
5. Explain physical and chemical properties of matter, chemical bonds, and reactions.
6. Compare and contrast the characteristics and behaviors of states of matter, solutions, acids, bases, buffers, and salts.
7. Connect chemical principles to human endeavors.