

CH 222: General Chemistry II

Explores stoichiometry; chemical reactions and equations; thermo chemistry; physical states of matter including properties of gases, liquids, solids and solutions; and chemical kinetics. Introduces organic chemistry. This is the second course in a three course sequence.

Chemistry 222 is the second of a three terms, 15-credit hour (5 hours/term), chemistry sequence designed to provide a year of general chemistry to science majors. It will meet transfer school requirements for such science majors as: chemistry, physics, chemical engineering, pre-medicine, and other pre-professional programs. The class consists of lecture, and laboratory. The lecture time is used to provide the student with basic chemical concepts and mathematical applications to chemistry. The laboratory re-enforces concepts presented in lecture and provides the student a hands-on opportunity to explore these.

Course Student Learning Outcomes

Upon completion of this course the student should be able to:

- Demonstrate a basic ability to use effective written and/or oral communication through the application of general chemistry concepts and reasoning using the language of chemistry.
- Demonstrate an emerging understanding of how general chemistry impacts the natural and technological environments.
- Demonstrate a basic ability to use detailed data collection, analysis and collaborative skills in order to explore general chemical principles, critically evaluate models and information, draw conclusions and communicate results in the context of the material covered in General Chemistry II.
- Demonstrate an emerging understanding of chemical principles and collaborative skills to effectively solve problems encountered in general chemistry using appropriate computational and reasoning skills.

Credits: 5

Prerequisites: [CH 221](#)

Program: [Chemistry](#)