

CH 223 : General Chemistry III

Explores acid-base chemistry, ionic equilibria; electrochemistry; nuclear chemistry; thermodynamics; and descriptive chemistry topics. Includes special topics as time and interest allow.

Special topics will be included as time and interest allows. Special topics may include: acid rain, bioenergetics industrial processes, kinetics of cellular metabolism, alternative fuels and the use of elements in nature and industry. Recommended for chemistry and other natural science majors, pre-professional majors in engineering, medicine and dentistry. Chemistry 223 is the third 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.

Credits 5

Subject

[Chemistry](#)

Course Outcomes

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

- Demonstrate an intermediate ability to use effective written and/or oral communication through the application of general chemistry concepts and reasoning using the language of chemistry.
- Demonstrate a basic understanding of how general chemistry impacts the natural and technological environments.
- Demonstrate an intermediate 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 III.
- Demonstrate a basic understanding of chemical principles and collaborative skills to effectively solve problems encountered in general chemistry using appropriate computational and reasoning skills.

Prerequisite Courses

[CH 222](#)