

UCLA

Student Learning Outcomes for the B.S. in General Chemistry

The knowledge learned by graduates with a B.S. major in General Chemistry will enable them to:

- demonstrate a broad mastery of fundamental chemical knowledge in the five foundation areas of the discipline (analytical, inorganic chemistry, organic chemistry, physical chemistry, biochemistry).
- demonstrate in-depth problem solving, critical thinking, and analytical reasoning in two of the foundation areas.
- integrate chemical knowledge with a complementary field to provide a coherent interdisciplinary understanding of the two disciplines.
- use computers in data acquisition and processing and available software for exploration and investigation of chemistry principles and models.
- understand the role of chemistry in addressing contemporary societal and global issues.

The skills learned by graduates with a B.S. major in General Chemistry will enable them to:

- perform basic laboratory procedures and techniques in at least four of the foundation areas involving the synthesis of molecules, and the measurement of chemical properties, structures and phenomena.
- handle chemicals in a safe manner following OSHA-approved regulations and procedures.
- work effectively in groups and teams of diverse peers to solve scientific problems.
- communicate chemical knowledge and experimental results through written reports and oral presentations.
- use chemical information resources to search and access current and prior research, and chemical and safety databases.