

# CHEM& 161 : General Chemistry with Lab I

**Credits** 5

**Quarter Offered** Fall

For science and engineering majors. This course focuses on the fundamentals of chemical structures: atomic nature of matter, atomic structure, periodic trends, quantum concepts, molecular structure, and chemical reactions. Three hours of lecture and four hours of laboratory. This class may include students from multiple sections. (Natural Sciences with Lab, Elective)

**Prerequisites**

Eligibility for [ENGL& 101](#); [MATH 98](#) or higher; or instructor permission

**Course Outcomes**

Communication - Distinguish between opinions, interpretations, and solid evidence with regard to chemical systems.

Quantitative Reasoning - Apply quantitative methods to characterize chemical structures (electronic transitions and reaction stoichiometry).

Information - Utilize the scientific method to explore chemical systems.

Critical Thinking - Describe chemical structures in terms of composition and geometry.

Personal & Interpersonal - Define chemistry as a scientific study of matter and its impact on society and everyday life.