

DEPARTMENT OF CHEMISTRY

Bachelor of Science in Chemistry

Mission Statement

Through dynamic and innovative classroom instruction and exciting research programs, the Chemistry and Physics Department supports the University's mission while striving to provide students with both a broad understanding of the fundamentals of the chemical sciences and practical laboratory training so that our graduates are prepared for a productive career in post-graduate studies and for a broad spectrum of professional careers, including medicine, pharmacy, forensics, environmental chemistry, as well as academic, governmental, and industrial research, by providing a high quality instruction program at the undergraduate level. The Chemistry program offers specializations within the B.S. degree program in the following areas: (1) Professional, (2) Environmental, (3) Molecular Biotechnology, (4) Pre-Health Professions, (5) Pre-Pharmacy, and (6) Forensic Chemistry.

Student Learning Goals and Outcomes

Goal 1 – Basic Knowledge: Students will demonstrate a depth of knowledge and the comprehension of the core concepts of Chemistry.

Student Learning Outcome: Students will demonstrate a functional knowledge of all basic areas of chemistry (analytical, organic, physical, inorganic, and biochemistry).

Goal 2 – Applied Skills: Chemistry graduates will demonstrate quantitative, qualitative, and technical skills central to chemistry.

Student Learning Outcomes:

- Students will plan the synthesis and characterization of inorganic and organic compounds.
- Students will integrate knowledge of scientific methods and instruments to conduct and interpret the results of quantitative and qualitative analyses.

Goal 3 – Science and Society: Graduates will be successful in securing and maintaining postgraduate employment, gaining admission to and completing graduate programs in Chemistry and related fields (including relevant professional degree programs (medicine, law, etc.)).

Student Learning Outcome: Students will execute a plan for entrance into post-graduation education or secure employment in a relevant field.