**Chemistry Department Mission and Goals**

Chemistry is unique among the sciences because of the emphasis placed on developing a molecular-level understanding of scientific phenomena. The **mission** of the Department of Chemistry is to impart this molecular perspective to our students and equip them with the skills required to apply a molecular view to solve chemical problems.

The **goal** of the Department of Chemistry is to provide students with the chemistry content knowledge, laboratory skills, communication skills, and research experiences to prepare them for careers as scientific professionals. To accomplish this goal, the Department offers courses for students planning careers in chemistry, teaching, or medicine and other health-related fields, as well as for students who require a basic chemistry background for other majors or to fulfill a general education science requirement.

The Department offers three degrees at the undergraduate level; a BS degree in chemistry, a BS degree certified by the American Chemical Society (ACS), and a BA degree.

* The goal of the BS Chemistry degree is to prepare students for careers in chemical industry and technical areas that require a solid foundation in chemistry, or for medical, dental, pharmacy or other health-related professional programs.
* The goal of the ACS certified BS Chemistry degree parallels the BS degree and in addition this degree program prepares students for graduate school in chemistry and chemistry-related fields.
* The goal of the BA Chemistry degree is primarily to prepare students for a career in teaching. But it is also an excellent choice for students who want to complete a double major.

**Program Learning Objectives**

The objectives for all three chemistry degree programs are based on the curricular guidelines established by the ACS for chemistry content and development of student skills.\* The program learning objectives are:

1. Students will apply their understanding of chemical principles to solve chemical problems by demonstrating an ability to formulate testable hypotheses, design and conduct experimental tests of hypotheses, and draw appropriate conclusions.
2. Students will demonstrate an ability to search the chemical literature, evaluate technical articles critically and manage many types of chemical information.
3. Students will demonstrate an ability to conduct laboratory work of high quality, including handling chemicals and other hazardous materials in a safe and ethical manner.
4. Students will develop their communication skills by keeping clear, concise, and accurate records of their laboratory work, authoring well-organized reports in a scientifically appropriate style, and using relevant technology in their communications.
5. Students will develop leadership and team skills through opportunities for group work in a classroom and laboratory setting.
6. Students will develop an understanding of the responsible treatment of data, citation of others’ work, and the role of chemistry in contemporary societal and global issues.

[\*ACS Guidelines and Evaluation Procedures for Bachelor’s Degree Programs]