Chemistry Program – Goals/Objectives/SLOs

Program Goal 1: Provide a chemistry degree program which will prepare our graduates to succeed in advanced degree programs, for jobs in industry, or to teach in secondary schools. Graduates should:

- demonstrate that their knowledge base in chemistry is nationally competitive.
- effectively communicate (both written and orally) scientific/technical information.
- demonstrate a solid understanding of data analysis and interpretation, problem solving, and graphing techniques.
- demonstrate proper use of laboratory notebooks.
- demonstrate proper use of common laboratory instruments.
- demonstrate proper laboratory techniques and laboratory safety.
- be able to work both independently and as a productive member of a group.
- efficiently conduct a literature search and information retrieval.
- understand the connection between chemistry/biochemistry and society, the environment, and technology.
- design scientific experiments.
- think and read critically.

Program Goal 2: Provide supporting courses for other science majors that will prepare those students to succeed in the discipline of their choice.

- Continue to offer rigorous and interesting chemistry courses that provide the necessary background for biology, geology, and pre-professional students to continue in their field with an understanding of the chemistry involved.

Program Goal 3: Provide supporting courses for non-science majors that stimulate students to think and understand the importance of chemistry to the world around them.

- Regularly offer chemistry-based general education science courses.
- Actively participate in pedagogical discussions designed to improve those courses.

Program Goal 4: Provide an environment in which the chemistry faculty are stimulated to continuously upgrade their teaching skills, to develop their expertise as chemists and to be creative members of the ASC faculty and the professional community.

- Encourage attendance/participation at professional conferences and workshops.
- Provide encouragement to professors to go on academically enriching sabbaticals.
- Provide encouragement to conduct appropriate research activities with undergraduate students.
- Provide encouragement and support to explore pedagogical innovation.
- Encourage participation on departmental and college committees, recruiting activities, and advisement of students.

Program Goal 5: Serve as a resource for the San Luis Valley and North Central New Mexico, including both K-12 schools and the general public.
• Provide expertise/assistance and materials for science (particularly chemistry) activities for K-12 teachers and students in our region.
• Conduct professionally-related enrichment activities for students and the general public in our region