

Chemistry Department

Program Review Presentation

Cohort 4: 2022-2023



AMERICAN RIVER COLLEGE

Chemistry Department Profile

By the numbers:

- 14 full-time faculty, 9 adjunct faculty, 5 full-time support staff (stockroom/IA)
- 10 different core classes, 1 independent study class, and several 0.75 unit support classes
 - “Chemistry in Your World” is a new GE class to be offered in Fall 2023
- 63% of classes are in person, 23% are hybrid, and 14% are fully online



Chemistry Department Profile

The purpose of the Department is to produce students who are:

- *highly educated in chemical concepts and practice*
- *academically prepared to transfer to technical education and 4-year degree programs*
- *critical thinkers who understand the role that chemistry plays in the world and who value equity and diversity*



Chemistry Department Profile

The **function** of the Department is to provide Chemistry classes and support for students with many different academic and career goals:

- General Education classes that satisfy the scientific lab requirement
- Introductory classes for students entering the 2-year chemistry series
- Prerequisite classes for the funeral service and healthcare fields
- General and organic chemistry classes that serve as prerequisites for chemistry and many other Associate's and Bachelor's degree programs (biological sciences, engineering, physics, geology, etc.).
- Support classes to improve the success rate of students taking the classes listed above.
- Tutoring support within the Department (IA and Beacon tutors).



Historical Analysis

Program Strengths:

- The academic and classroom experience
- Our interaction with the local community, academic institutions, and local industry and our involvement in programs that encourage local K-12 students to pursue higher education, especially in STEM fields

Program Challenges:

- Closing the equity gap that still exists between DI groups and the rest of the student population
- The Chemistry building itself, which is seriously outdated and barely fit for purpose
- All aspects of our department are understaffed.



Objectives

- *Equally high student success across all demographics*
- *A new Chemistry building*
- *Enough full-time/adjunct faculty (and FTE) to accommodate all the students who want to take core chemistry classes at ARC*
- *Enough full-time/adjunct faculty (and FTE) to offer several ‘fun’ chemistry classes to fulfil GE requirements and to attract interest from the local population (“Chemistry in the Kitchen”, or an Environmental Chemistry class, for example)*



Strategic Enhancement

In our ideal future, there is:

- *Academic equity*
- *A Chemistry building with facilities to promote learning, collaboration and social justice*
- *A culturally competent, diverse faculty*
- *Enough FTE to offer Chemistry classes to accommodate every student*
- *Academic and community support for all students, within the Department*



Planning Steps

- *Connect students to campus resources*
- *Interface with existing services for DI students*
- *Continue diversity and social justice training*
- *Analyze data and develop actions to address any deficiencies*
- *Expand course offerings*
- *Continue/expand collaborations with other institutions (UC Davis, Sac State)*
- *Continue to push for a new Chemistry building*

