

**CSU CHICO**  
ASSESSMENT SUMMARY UPDATE

PROGRAM: BA in Chemistry

Year of review	Student Learning Outcome	Describe assessment activity done this year for this SLO	Findings	Based on the results or evidence, what action was taken regarding program improvements?
2016-2017	Students achieve proficiency in the understanding of chemical theory	A standardized American Chemical Society (ACS) one-semester Inorganic Chemistry exam (Form 2009) was used as the final exam in CHEM 361. This Inorganic Chemistry course is taken by our three majors: Chemistry (BS), Chemistry (BA), and Biochemistry (BS).	Results indicated that 38% of the Fall 2016 students had "mastered" Outcomes A, B, & C, and 68% had "practiced" Outcomes A, B, & C. Results by topic for the exam indicated that two topics, "solids" and "geometry", appeared more problematic than other topics for Fall 2016 students.	None
2015-2016	Students achieve proficiency in quantitative analysis of experimental data	Embedded assessment was carried out in one CHEM course that spanned our three majors: Chemistry (BS), Chemistry (BA), and Biochemistry (BS)	The sample consisted of 37 total students from two sections of CHEM 320. Students were assessed for their proficiency in analyzing experimental results and categorizing data statistically using computer technology. The assessment was made using data from their final six experiments in CHEM 320. CHEM (BA+BS) majors had the greatest percentage of students achieving the measure. This result suggests that CHEM (BA+BS) majors were more proficient in analyzing experimental results and categorizing data statistically using computer technology. While this statement appears true for the time frame assessed, much more data is needed before any generalizations can be made.	None

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2014-2015	Students achieve proficiency in quantitative analysis of experimental data	Embedded assessment was carried out in one CHEM course that spanned our three majors: Chemistry (BS), Chemistry (BA), and Biochemistry (BS)	There were no CHEM BA students in the assessed course.	No data to act upon.
2013-2014	Students will have a good understanding of the theories of inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, and biochemistry.	Embedded assessment was carried out in 2 different CHEM courses that spanned our three majors: Chemistry (BS), Chemistry (BA), and Biochemistry (BS)	There were no CHEM BA students in the assessed courses.	No data to act upon.
2012-2013	Students will have a good understanding of the theories of inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, and biochemistry	Embedded assessment was carried out in 2 different CHEM courses that spanned our three majors: Chemistry (BS), Chemistry (BA), and Biochemistry (BS)	Our CHEM (BA), CHEM (BS), BIOC (BS) students were assessed for their understanding of the theories of biochemistry. National averages for the 2012 standardized exam were not available at the time this report was submitted. Therefore no conclusions could be drawn from this year's data. The total number of students in this assessment was very small and this has made the interpretation of the results problematic and speculative.	None