

ASSESSMENT PLAN: BS Biochemistry

Date Updated: 12/07/2021

PROGRAM MISSION

[CSUEB Missions, Commitments, and ILOs, 2012](#)

PROGRAM LEARNING OUTCOMES (PLOs)

Students graduating with a BS in Biochemistry will be able to:

PLO 1	Demonstrate knowledge in the various area of chemistry, including inorganic chemistry, analytical chemistry, organic chemistry, physical chemistry, and biochemistry.
PLO 2	Use quantitative reasoning to analyze and solve chemical problems and evaluate chemical data.
PLO 3	Work effectively and safely in a laboratory environment to perform experimental procedures and operate modern chemical/biochemical instruments.
PLO 4	Design, carry out, record and analyze the results of chemical experiments.
PLO 5	Communicate chemical or biochemical issues clearly.

10. Time (which semester(s))	

	based on data collection
7. <i>Assessment Instrument</i>	Exams or laboratory reports
8. <i>How data will be reported</i>	Grades will reflect the number of items that attain different levels of mastery (#, 5 is full mastery)
9. <i>Responsible person(s)</i>	Faculty
10. <i>Time (which semester(s))</i>	Spring 2025
11. <i>Ways of closing the loop</i>	Results and planning to address the shortcomings
Year 5: 2025-2026	
1. <i>Which PLO(s) to assess</i>	PLO 3
2. <i>Is it aligned to an ILO?</i>	Yes
3. <i>If yes, list ILO</i>	Specialized Discipline
4. <i>Course name and number</i>	CHEM 332 Organic Chemistry II CHEM 443 Biochemistry Lab I
5. <i>SLO from course</i>	Safely carry out standard laboratory techniques for the purification of organic compounds
6. <i>Assessment activity</i>	Parsing of Safety Data Sheet (SDS) and performing the experimental techniques
7. <i>Assessment Instrument</i>	Laboratory assignments and Laboratory Report rubric
8. <i>How data will be reported</i>	Qualitative, reflective assessment of laboratory safety and performance
9. <i>Responsible person(s)</i>	Course Instructors, Assessment Rep
10. <i>Time (which semester(s))</i>	Fall 2025, Spring 2026
11. <i>Ways of closing the loop</i>	Internal assessment of results with planning to address shortcomings