



Annual Assessment Report for Academic Programs

The University Assessment Team advocates for the enhancement of student learning through purposeful, meaningful, and feasible student-outcomes assessment practices. The Assessment Team seeks to collaborate with programs, departments, and units to ensure that effective assessment of student learning occurs across the University. To assist in meeting this goal, the Team requests that you complete this Annual Assessment Report form to document student learning in your program. A PDF version of this completed form will be posted to the Academic Affairs Assessment website. Please note that this Annual Assessment Report form should only be completed after you have an Assessment Plan for Academic Programs forms on file with the University Assessment Team. The plan is completed once and only updated when revisions have been made to components of the plan.

1. **Degree Level and Program Name:** BA Chemistry, BS Chemistry, BS Biochemistry
2. **College/School:** College of Engineering & Science
3. **Assessment Overview** - Briefly share how student learning outcomes assessment is conducted within your program/department (e.g. number of outcomes, examples of assignments used, and frequency of assessment).

The BA/BS Chemistry and BS Biochemistry programs are comprised of eight (8) total shared learning outcomes and two (2) which only apply to the BS Biochemistry degree, with approximately three (3) outcomes assessed each year. Faculty assess student learning outcomes using direct measures from: a majors exit exam (ACS DUCK) and embedded assignments (e.g., exams, quizzes, projects, lab reports, oral presentations - all using rubrics for grading).

4. **Student Learning Outcomes & Benchmarks** -Which student learning outcome(s) from the assessment plan filed with the University Assessment Team is/are being reported on in this report? Include the corresponding benchmark(s) for each outcome.

SLO 7 - Work safely and effectively in a laboratory setting, including safe handling and disposal of hazardous materials. BS Biochemistry ONLY: SLO 9 - Apply knowledge with regard to biological structure/interactions, biological reactions, and biological equilibria/thermodynamics; and SLO 10 - Use biochemical techniques including statistical analysis of experimental data, electrophoresis, chromatographic separations, and isolation/identification of macromolecules.

5. **Institutional Outcomes** - For which institutional outcome(s) do the reported student learning outcome(s) align?

SLO Outcome Alignment	Institutional Outcome
	I. Jesuit & Mercy Values
	II. Diversity & Cultural Awareness
Yes	III. Critical Thinking & Problem Solving
Yes	IV. Communication
	V. Professionalism
Yes	VI. Lifelong Learning



6. **Assessment Period:** Select the academic year for which you are reporting results (i.e. when data were collected):
2025-2026

7. **Program Assessment Results** -Briefly summarize the assessment results and how they relate to benchmark(s).

SLO 7 - Over 90% of all students (over 200) enrolled in CHM 1100, 1120, 1150, 2250, 2260, 2310 (all laboratory classes) successfully completed American Chemical Society (ACS) online safety training course by passing an assessment quiz at the end, which is above the 75% benchmark. The number of times the assessment quiz is administered for passing is not recorded by the instrument.

SLO 9 - Over 80% of students (78 total) of students enrolled in CHM 4710 are able to pass a CER (Claim, Evidence, Reasoning) problem set with the majority of course outcomes passed on the first or second try, which is above the benchmark of 50%. Student response strengths are in identification of biomacromolecules, where opportunities for improvement could be found in enzyme kinetics calculations.

SLO 10 - Over 75% of students (15 total) enrolled in CHM 4750 are able to successfully perform the biochemical technique of electrophoresis and adequately describe the procedure's purpose and execution in a lab report. Student response strengths were in both purpose and execution of the method, where areas for improvement centered around deficient explanations on purpose, execution, or both.

8. **Planned Actions and/or Actions Taken in Response to Assessment Results** - Briefly summarize how you are using the assessment results to enhance student learning and improve program quality.

With regard to SLO 7, our Department continues to struggle with proper safety training for faculty, students, and TAs. A new Safety Task Force for 2026 will convene next year to consider safety training adequacy, amongst other items. With regard to SLOs 9/10, our two (2) biochemistry faculty will be considering both ACS certification and ASBMB (American Society of Biochemistry and Molecular Biology) certification for the BS Biochemistry degree in 2026. These certifications aim to delineate and strengthen the course-level outcomes for our Department's biochemistry courses (CHM 4700, 4710, 4720, 4750).