

## 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 and 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 major's exit exam and embedded assignments (e.g. exams, quizzes, projects, lab reports, oral presentations all using rubrics).

**4. Student Learning Outcomes -**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 2: Use appropriate standard laboratory equipment and instrumentation to conduct an experiment, including recognizing the value and limitations of modern methods of analysis based on knowledge of instrument design and applicable calibration methods; SLO 3: Design, perform, record, and analyze results from chemical experiments (interpret data qualitatively, quantitatively, and statistically, including error analysis); SLO 4: Communicate effectively about chemistry verbally and in writing.



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):

2021-2022

7. **Results, Planned Actions, and/or Actions Taken** -Briefly summarize the assessment results, how they relate to benchmark(s), and how you are using them to enhance student learning and improve program quality.

SLO 2 and 3: Outcomes are aligned, but our assessment methods vary too much across courses. For SLO 4, we agree this is an important outcome (aligns with institutional-level outcome IV), however we are again too varied in our assessment methods across laboratory courses. Note that this is what SLOs 2, 3, and 4 have in common - primarily concerns of our laboratory course sequence. Two (2) items have arisen as a result of this data: 1) We had a Department strategic planning retreat in May 2023 that revealed we need to completely re-write our degree-level outcomes to make them more specific and assessable. This is forthcoming in 2024 after program review self-study submission. 2) Our new all-major senior seminar course (CHM 4900, first offering will be W24 semester) will attempt to be the "exit-point" assessment for some of these new degree-level outcomes.

Attachment(s):

None