



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: BS Biology

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 BS Biology department learning outcomes are assessed through required courses in the major as well as senior exit surveys that are administered annually.

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.

For this report the following learning outcome is presented:

2. design, conduct, statistically analyze, and communicate (in writing and orally) biological research through inquiry-based experiences.

To achieve this goal BS biology students take two semesters of introductory to biology lab (BIO1210/1230) and then three upper-level BS biology lab courses as part of the BS Biology major. Students who complete these courses (by passing the 5 different courses) will have achieved the above outcomes listed for the BS biology major.

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
	VI. Lifelong Learning

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

This is data from several academic years combined.



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.

Of the upper level laboratory courses offered over half (8 of 13) are inquiry-based, research-based, or CURE labs that have been approved for the research concentration. These courses all include aspects of communication, data analysis, and inquiry-based course activities. As an example, manuscript from 2023 is included from BIO2710 that shows student reported gains in several areas. These psychometric analyses are also measured in our senior exit survey.

Attachment(s):

[merkle-et-al-2023-fly-cure-a-multi-institutio_Jacob Kagey.pdf](#)