

End of Year Assessment Report for Programs

Program: Biology	Semester/year: 2020-2021
Program Director: Eric Nord	Submission date: May/20/2021
Year in Operational Plan: Year 2	

Assessment Methods and Benchmarks

Based upon your operational plan, what components of your program are assessed this year? For each program objective being assessed this year, report the data you have collected for Introductory, Developmental, and Mastery levels. Put this information in a chart. Refer back to Section D in your Operational Plan. Because this year has not been a particularly normal year, you may have adjusted your plans. Therefore, report on the data you have available.

Program Objective	Introducing	Developing	Mastering
PO 2.1	Course Activity: BIOL 112 Independent Experiment	Course Activity: BIOL 370 Lab Project grade.	Course Activity: BIOL 410 Paper: Intro and Data Use Grades
	Benchmark: > 70%	Benchmark: > 70%	Benchmark: >70%
	Evidence: 26/33 (79%) met, 7/33 (21%) did not meet.	Evidence: 21/21 (100%) met.	Evidence: 17/26 (65%) met, 9/26 (35%) did not meet.[2]
PO 2.2	Course Activity: BIOL 112 Primary Literature Assignment	Course Activity: BIOL 370 Primary Literature Assignment	Course Activity: BIOL 410 Paper: Literature Use Grade
	Benchmark: > 70% [1]	Benchmark: > 70%	Benchmark: > 70%
	Evidence: 26/33 (79%) met, 7/33 (21%) did not meet.	Evidence: 18/21 (86%) met, 3/21 (14%) did not meet.	Evidence: 20/26 (77%) met, 7/26 (23%) did not meet. [3]

[1] Maximum of two primary lit assignments; the final assignment was optional (?)

[2] Two students from the fall repeated the class in the spring.

[3] 2/26 did not complete this assignment.

Analysis of Assessment Findings

Since this is the first cycle of the four-year cycle of assessment of these program objectives, we can't look back at previous findings for these program objectives. The percent of students meeting the objectives are quite high, with only one instance scoring below 77% (PO 2.1 at the Mastery level).

- (1) These findings don't actually reveal that much new information about our program. We have a modest proportion (estimated 15-20%) of students who have not demonstrated a strong commitment to learning biology.
- (2) The main weakness of this assessment method is that the grades and assignments used in assessing these objectives occur in classes that are taught by different faculty in rotation, and therefore the way the assignments are given, the amount of supervision students are given, and the way assignments are assessed may differ from year to year. Another weakness is that the assignments used are approximately developmentally appropriate for the courses in which they are given, so the % meeting a threshold in I, D and M courses is not directly comparable. This information is all revealed by knowing how the 'data' was gathered, not from the 'data' itself.
- (3) There have been no program changes since this assessment process was implemented, so we can't speculate about the impacts of such changes on student learning.
- (4) The only recent changes in the assessment process are the implementation of this assessment process.

Sharing and Discussion of Assessment Findings

The faculty review and discuss the findings. The faculty regularly discuss course and program assessment in formal and informal department meetings. These discussions often lead to adjustments in learning activities.

Use of Assessment Findings for Program Improvement (Action Plan)

- (A) Describe any changes in (1) the program and/or (2) the assessment process that are planned in response to the assessment findings from this academic year.
There were no major findings in the assessment data from this year.
- (B) Briefly summarize the status of the previous years' or semester's action plans. Are they complete, still being implemented, on hold, or some other status?
A number of the action plans from the 2020 assessment cycle are still on hold. This is largely due to the program being under-staffed the past year and the additional demands of teaching during the COVID-19 pandemic.
- (C) For each intended improvement or change in the program stemming from this year's data, provide a detailed timeline for follow-up data collection, data analysis, and data review.
No major action items from this year's assessment.
- (D) Based on your CDL assessment exercise, describe how you will make programmatic changes to better prepare your students to demonstrate high levels of achievement on the UNIV 401 SLOs.
We don't see any evidence that Bio students are performing particularly poorly on the UNIV 401 SLOs. Anecdotal evidence from the Experience First program is that Bio students are viewed as generally well prepared and strong team members.
- (E) Indicate your plans to make your program more experiential in the coming year?

This program is already highly experiential. The core of the Biology program includes 3 hour weekly labs in CHEM 111, CHEM 112, BIOL 370, BIOL 305, and 2 hour weekly labs in BIOL 110, BIOL 112, and BIOL 360. In addition to this, a majority of students complete at least 3 credit hours of practicum (120 hours). We can't introduce more experiential learning without either removing course content or adding more courses.

Supporting Documents

[If you attach any supporting documents, please list them here. You may submit these supporting documents into the D2L dropbox.]