

Assessment of Student Learning Plan (ASLP): Biology

2018-19 Academic Year

University of Southern Maine

A. College, Department, Date

College CSTH
Department Biological Sciences
Date 6/4/2019

B. Contact Person for the Assessment Plan

Name and title Jeff Walker

C. Degree Program

Name of Degree Program Biology

D. Assessment of Student Learning: Program Assessment

Step 1: Identify the Student Learning Outcomes (SLO's)

a. Are your student learning outcomes published on your department's website?
Yes/No

i. If yes, please provide the url: _____

ii. If no, please list 3-5 of the most important student learning outcomes for your program. **What will students know by the end of your program?**

1. Our graduates will have a basic understanding of the expansive field of modern biology, from molecules to ecosystems. In addition, they will understand the basic principles of chemistry, physics, and mathematics that form the foundation on which all of biology rests.

2. Students will develop quantification skills and lab/field skills which they can apply to collecting and interpreting data.

3. Students will acquire more sophisticated critical thinking and analytical reading skills, combined with science communication skills and an appreciation of how research advances our understanding of the biological sciences.

4. We also have a fairly comprehensive list of specific learning outcomes for each of the major areas of our degree, which is in our last self-study (2018).

b. Please identify **which of your student learning outcome(s) were assessed this past academic year.**

None at the department-wide level. Assessment at the level of individual courses is conducted by some instructors.

c. Do you have a **matrix or curriculum map** showing when your student learning outcomes are assessed and in which courses? **Yes**

i. If yes, do you have this map published on your website? **No.** Please provide the url or attach a copy of the curriculum map.

| Goal | Outcome Introduced | Outcome Reinforced | Outcome Mastered |
|--------------------------|--|---|------------------------------------|
| Foundations | BIO 105/106, 107, 109 CHY 113/114, 115/116 PHY 111/114 MAT 152, 220 | BIO 221, 223 CHY 251/252, 253/254 PHY 112/116 | BIO 300+ courses |
| Evolution | BIO 105, 107, 109 | BIO 217 | Area 1 courses 300+ courses |
| Genetics | BIO 105, BIO 223 | BIO 201 | Area 2 courses |
| Specialization | BIO 200+ courses | BIO 300+ courses | BIO 300+ courses |
| Lab/field skills | BIO 106, 107 | BIO 200+ courses | BIO 300+ courses |
| Scientific communication | BIO 106 | BIO 107 | BIO 300+ courses |
| Scientific worldview | BIO 105, 107, 109 | General Education Clusters, BIO 421 | Undergraduate research experiences |

Step 2: Assessment Methods Selected and Implemented

a. Identify which assessment measures (beyond individual student grading) were used to determine whether students achieved the stated learning outcomes for the degree. (NOTE: Many undergraduate programs are using their recently approved Capstone courses to assess student learning. Assessment plans included in your Capstone Proposal in the CCC may be referred to as examples of assessment work in your program.)

At this point we use course grades as an indicator of proficiency. We do not have a systematic degree-wide assessment program.

- b. Briefly describe when you implemented the assessment activity; if a rubric or other structured approach was used to assess student outcome achievement, please describe and/or attach the rubric.*

Step 3: Using the Assessment results to Improve Student Learning

- a. Briefly describe your unit's process of reviewing the program assessment results (for example, annual discussion by faculty committee, etc.).*

We do not have this implemented yet.

- b. Identify the specific changes that have been or will be made to improve student learning based on these program assessment results. (For example, what changes will the program make at the assignment, course, or program level to improve student learning, based on the assessment results?)*

Develop improved methods of assessment. Institute a regular review process that covers department-wide outcomes. Appoint a committee to review learning outcomes and progress.

- c. Date of most recent program review/self-study? **2018***

- E. Other Assessment Activities:** *Briefly describe any additional assessment-related activities your program is using at the course level (for example, creating common assignments and/or assignment rubrics for use across different sections of required courses, examining student progress in entry-level courses, other assessment projects implemented by individual faculty, etc.).*

This is done by some faculty for specific courses but hasn't been done at the level of the whole program

F. Community Engagement Activities in your departmental curriculum:

- a. Does your department have a student learning outcome that is related to any community engagement activities? If so, please state the outcome.*

No, but in response to University encouragement, many of our individual classes have implemented community engagement activities. This has not been formalized into a learning outcome.

b. Please indicate if any of the community engagement activities listed below are included in your program's curriculum, by noting which activities are required or optional for students in your major.

| <u>Community Engagement Activity</u> | <u>Required/Optional</u> | |
|--|--------------------------|---------------------------------------|
| Student Research (related to a community-based problem) | R | O <input checked="" type="checkbox"/> |
| Student-Faculty Community Research Project | R | O <input checked="" type="checkbox"/> |
| Internship, or a Field Experience | R | O <input checked="" type="checkbox"/> |
| Independent Study (community-related project) | R | O <input checked="" type="checkbox"/> |
| Capstone Course (community-related project) | R | O <input checked="" type="checkbox"/> |
| Service-Learning (course-based) | R | O <input checked="" type="checkbox"/> |
| Study Abroad, or an International Program | R | O |
| Interdisciplinary Collaborative Project (community related) | R | O |
| Student Leadership Activities (related to a team project) | R | O <input checked="" type="checkbox"/> |
| Students/Faculty Community Leadership (e.g., advisory boards, committees, conference presentations) | R | O |
| Other activities (please list): | R | O |

c. Please list any courses (i.e. EDU 400) that have a community engagement activity in your program.

*Entry-level courses **BIO 107**; Mid-level courses: **BIO 282**; Upper-level courses: **BIO 337, BIO 407**,*