



Assessment of Student Learning Plan (ASLP)

2019-2020 Academic Year

Overview Information:

College College of Science, Technology, and Health (CSTH)

Department **Computer Science**

Degree Program Bachelor of Science

Contact Person for the Assessment Plan: David Briggs

Current Date: July 24, 2020

List the date of the most recent academic program review/self-study:

We did a course review for four of our courses, COS 360, COS 398, COS 450, and COS 485 in May 2019 in connection with the ABET accreditation. The last full ABET self study was done in 2016. As we no longer have the requisite staff to maintain ABET accreditation, we did not follow the schedule this spring (2020) and will be moving to our own scheme in the coming year.

Program Assessment Plan Information:

Do you have a Formal Program Assessment Plan? **Yes** **X** **No**

If YES, please attach your Program Assessment Plan/Cycle, or indicate the link on your website: _____ . Then, complete **Step 3** of this ASLP form (see **pages 4-5**) to describe how the assessment results were used for program improvement purposes.

If NO, your department/program does not have a Formal Assessment Plan (beyond this academic year), please complete all sections of this ASLP form.

*(Please see assessment website for an example/template of a 3-year assessment plan)

Mission Statement:

1. Provide your program's mission statement in the space below, or provide a link to the statement from your program's webpage.

Mission Statement of the Department of Computer Science

- The Bachelor of Science in Computer Science prepares the student for continued study at the graduate level and/or a career in industry and success in their future career pursuits.
- Graduates have a solid base of Computer Science knowledge and experience.
- Graduates have the ability to communicate well with others.
- Graduates have the ability to work individually and in teams on a shared software project.
- Graduates have the interest, knowledge and skills that enable them to participate in life-long learning and to adapt to an ever-changing technological environment.
- Graduates have the ethical background to deal successfully with the social and technical ethical problems that will inevitably arise in their lives and work.

2. Briefly describe the ways in which your program's mission statement is aligned with the USM mission.

The USM mission is expressed in broader terms that are not specific to a degree, but there are some points of contact. The USM mission mentions educating "future leaders" and certainly we stress preparation for entering the labor force or continuing study at the graduate level.

The USM mission mentions civic participation, public service and community involvement, and our program emphasizes collaboration, communication and preparation for dealing with ethical and social problems. Our mission also promotes preparation for life-long learning, through knowledge of unchanging fundamental principles and personal disposition and acknowledgement of the need for it. This item supports the USM mission of educating people to be long term contributors to their communities and societies.

Diversity, Equity, and Inclusion

If your program has diversity, equity, and inclusion related goals, or a diversity, equity, and inclusion statement; please provide a link to the statement and/or goals. Then, briefly describe any assessment activities related to your program statement/goals regarding diversity, equity, and inclusion.

At this time we do not have any explicitly stated diversity goals. We will be considering fashioning some in the coming academic year. We have been trying to make our faculty more diverse, but that is not entirely in our control. We have always striven to provide the same level of care and attention to all students, regardless of their specific features. Squaring that broad goal with policies and mechanisms that target particular subsets is something we will consult USM officers with more expertise in this area.

Matters that I think we should address are

1. determining specific goals
2. determining practices that can contribute to their achievement
3. implementing metrics for evaluating if the goals are being achieved

Assessment of Student Learning: Program Assessment Steps

Step 1: Program-level Student Learning Outcomes (SLO's)

- a. Please provide the **URL** for your **program-level student learning outcomes** as published on your department's website:

In the past we have used the ABET outcomes for Computer Science programs, and they are given under STUDENT OUTCOMES at url:

<https://usm.maine.edu/cos/mission-statement-department-computer-science>

We will modify these in the coming year to reduce redundancy and make them more specific.

- b. Please provide the **URL** of your **curriculum assessment map** showing when your student learning outcomes are assessed and in which courses:

If your program's curriculum assessment map is **not** published, please complete the template (on page 6 of this document), and include it with your ASLP, or attach your own version.

In the past, we used a plan that associated the ABET outcomes with specific required courses and assessed the outcomes within those courses. I expect we may continue that practice of assessing specific outcomes within courses, but we may also consider an exit exam. The exact plan is pending.

- c. Please list the program learning outcomes which were assessed since the submission of your last ASLP (May 2019).

Our modified list of outcomes is available at this time.

Step 2: Assessment Methods Selected and Implemented /Summary of Results

- a. **Identify the assessment measures (evidence of student learning) that were used to determine whether students achieved the stated learning outcomes for the degree.**

Of course, every class has assessments to determine what the student will receive for a grade in the class, but individual faculty members were assessing learning for their own class outcomes w/o coordination at the department level for the degree outcomes. A scheme for assessing degree outcomes remains to be developed, but will likely not involve all courses but just required courses later in the curriculum

- b. Please check all the measures used since the submission of your last ASLP (May 2019), on the chart below. Also indicate when you implemented the assessment activity.

<u>Check Assessment Methods Used this Academic Year</u>	<u>When Implemented</u>		
<input type="checkbox"/> Artistic Exhibition/Types of Performance	Fall	Spring	Summer
<input type="checkbox"/> Class assignments/Exams/Papers (completed in course)	Fall	Spring	Summer
<input type="checkbox"/> Capstone Project (written project, non-thesis paper)	Fall	Spring	Summer
<input type="checkbox"/> Comprehensive or licensure exam (created by external org)	Fall	Spring	Summer
<input type="checkbox"/> Exit Exam (created by department or program)	Fall	Spring	Summer
<input type="checkbox"/> Exit Interview (individual or indiv self-reports of outcomes)	Fall	Spring	Summer
<input type="checkbox"/> Employer meetings/discussions on student outcomes	Fall	Spring	Summer
<input type="checkbox"/> Focus Groups (self-reports of outcome attainment)	Fall	Spring	Summer
<input type="checkbox"/> Internship/Fieldwork (evaluations of performance)	Fall	Spring	Summer
<input type="checkbox"/> Oral Performance/conference presentation	Fall	Spring	Summer
<input type="checkbox"/> Portfolio of student work	Fall	Spring	Summer
<input type="checkbox"/> Reflection Essays (self-report of outcome achievement)	Fall	Spring	Summer
<input type="checkbox"/> Research Papers (used for course & program assessment)	Fall	Spring	Summer
<input type="checkbox"/> Supervisor/Employer Evaluation (performance outside of class)	Fall	Spring	Summer
<input type="checkbox"/> Student Survey information (student self-reports on outcomes)	Fall	Spring	Summer
<input type="checkbox"/> Thesis/Dissertation (used for course & program assessment)	Fall	Spring	Summer
<input type="checkbox"/> Other: please explain			

Some of these are used, but as mentioned not yet in a coordinated way.

- c. **Briefly describe the implementation process** (i.e. where were students assessed, what courses, what class levels, or any other specific details, etc).

Our plan is not developed yet.

- d. **Provide a brief summary (numerical or narrative) of your assessment results** (e.g., . an illustration of the rubric-based scores, percentage of those who met the learning outcome you assessed, number of students assessed and findings, copies of instruments or rubrics used, etc.)

We have not implemented it yet. We intend to do this in the coming year.

- e. **Provide a brief summary of what your program learned or concluded from the evidence you collected** (e.g., did your program meet the expected goal or benchmark, does the new knowledge raise additional questions, do you need to collect additional types of data, did you get insights about the assessment procedures or about teaching and learning in your program?, etc.)

Step 3: Using the Assessment results to Improve Student Learning

- a. Who interpreted or analyzed the results that were collected this past year? (check all that apply)

Program instructors/faculty
 Faculty committee
 Ad hoc faculty group
 Dept Chair/Program Director/Dean
 Faculty advisor
 Students (assistants, interns)
 Other: please explain

- b. How did they evaluate, analyze, or interpret those results? (check all that apply)

Used a rubric or scoring guide(s) for an assignment, paper, etc.
 Scored exams/tests/quizzes
 Used professional judgments (no rubric or scoring guide)
 Compiled or reviewed survey results
 Reviewed qualitative methods (interviews, focus groups, open-ended responses)
 External organization scored/analyzed data (licensure, comp exams)
 Other: please explain

- c. Indicate how the program will use (or has used) the results (check all that apply):

Assessment procedure change (student outcomes, curriculum map, rubric, evidence collected, sampling procedure, communications with faculty, etc.)
 Course changes (course content, courses offered, new course, pre-requisites, course requirements, etc.)
 Course pedagogy changes (teaching)
 Personnel or resource allocation changes
 Program policy changes (admission requirements, student probation policies, course feedback forms, etc.)
 Student's out-of-course experiences (co-curricular requirements, program website, program handbook, student workshops, etc.)

__ Student Advising experiences (advisor-advisee relationship, communication of changes or expectations, etc.)

__ Results indicated no action needed, students met expectations

__ Other: please explain

d. Briefly explain each of the program changes/improvements indicated above.

e. Indicate when the program improvements (noted above) will be implemented or if you already made program changes (e.g., during the summer months, beginning of the fall semester, etc.).

Other Assessment Activities: Briefly describe any additional assessment-related activities being done at the course level (e.g., common assignments and/or assignment rubrics for use across different sections of required courses, examining student progress in entry-level, capstone, or other courses, other assessment projects implemented by individual faculty, etc.)

The four full time members met via Zoom to discuss changes to the content of the initial three courses. All faculty were engaged and removed some content from the second course, but there was clearly more to be done.

No assessment activities: If your program did not engage in any assessment activities this past academic year, please explain, and please indicate what assistance you need.

I think we will be able to adapt the ABET outcomes and work up our own scheme. I do have a number of documents from your office that I am looking at.