



Assessment of Student Learning Plan (ASLP)

2019-2020 Academic Year

Overview Information:

College CSTH

Department **Mathematics and Statistics**

Degree Program BA in Mathematics and Statistics

Contact Person for the Assessment Plan: Silvia Valdes

Current Date: 07/13/20

List the date of the most recent academic program review/self-study: The last time we prepared our self-study materials was during the 2016-2017 academic year.

Program Assessment Plan Information:

Do you have a Formal Program Assessment Plan? **Yes** **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.

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

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.

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:

<https://usm.maine.edu/sites/default/files/math/Curricular%20Map%20of%20Program%20Outcomes%281%29.pdf>

- 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.

<https://usm.maine.edu/sites/default/files/math/Curricular%20Map%20of%20Program%20Outcomes%281%29.pdf>

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

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.**
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 checked="" type="checkbox"/> Class assignments/Exams/Papers (completed in course)	Fall	Spring	Summer
<input checked="" 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 checked="" 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 checked="" type="checkbox"/> Other: please explain			
Class Presentations (oral exposition of projects and/or final projects) for upper level division courses. This type of assessment has been in place for several years.			

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

- d. **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.)

During the 2019-2020 academic year, we implemented many of our initiatives in order to overcome the high number of DWLFs in our 100-level courses. Most of this work was done, during fall 2019. Our goal is to continue working on our curriculum and implementing these changes to better serve our students over the coming years.

A Departmental committee reviewed and mapped out the curriculum in MAT 101 and MAT 108, and began the implementation of these curricular changes fall 2019. Basically, we

revised and reduced the number of topics taught. Our goal is teaching, in each course, a sequential a cohesive amount of content in a more substantial way. Also, another Sub-group of faculty worked on revising the topics taught in MAT 140. This course needs to be a foundational course for our Calculus A course. This is a work in process, it was not concluded due to the unforeseen circumstances (School closed on March 12 due to COVID-19). We are planning to continue with this work as soon as we can.

In addition, at the beginning of the academic year 2020-2021, our assessment-committee will begin to revise the learning outcomes for our Calculus sequence (A, B, and C).

Until March 12, 2020, many of our students were required to take satisfactorily the Accuplacer Math Placement Exam ([QAS—Quantitative reasoning, Algebra, and Statistics Test], and [AAF --- Advanced Algebra and Functions Test]), a proctored test, to be placed in some of our courses at the 100-level in courses such as: MAT 100 Mathematics Bridge, MAT 101 Algebraic Bridge, MAT 105 Mathematics for Quantitative Decision Making, MAT 108 College Algebra, MAT 120 Introduction to Statistics, MAT 140 Pre-Calculus Mathematics, and MAT 152 Calculus A.

Effective April 21, 2020 (due to unforeseen circumstances-- Covid-19) we start using an interim, not proctored, Math Placement Test, the UMaine Math Placement test.

Since middle of June, a sub-group of our faculty have been working on two projects: (1) Math Placement Test (short term), and (2) Math Placement Test (long term).

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.