



CALIFORNIA STATE UNIVERSITY, LONG BEACH
VICE PROVOST FOR ACADEMIC AFFAIRS

Memorandum of Understanding
Department of Mathematics and Statistics
College of Natural Sciences and Mathematics
March 2019

This Memorandum of Understanding outlines the consensus reached by the Department of Mathematics and Statistics, the College of Natural Sciences and Mathematics, and the Division of Academic Affairs, based on the recently conducted program review (Self-study 2007-2016; external review March 23-24, 2017; and UPRC report November 2, 2017). It describes the goals to be achieved, and the actions to be undertaken by all parties to this MOU to achieve these goals, during the next program review cycle. Progress toward goals is to be addressed in an annual report.

The Department of Mathematics and Statistics completed its previous program review in 2010. In the period since the previous review, the Department has acted on some of the action items agreed to in the 2010 MOU by adoption of ALEKS PPL to assist with placing students in the most appropriate math pathway, and by working to standardize multi-section courses so students have similar learning opportunities and are assessed on the same content. The Department did not follow up on the MOU action item to develop learning objectives and assessments, and complete assessments in each option in the undergraduate and graduate degrees offered. In addition, there was no reporting on the action item to analyze/assess data and improve performance for students in large lecture classes.

A number of strengths were identified in the program review reports. Reviewers noted the impressive research and publishing activity of the faculty, as well as the involvement of students in faculty research. The Department has undergone significant redesign of courses and degrees to better meet the needs of Foundation General Education students, as well as majors. The Department has increased student success in its core courses through faculty collaboration, early identification of students who are struggling, and in-house tutoring by undergraduate and graduate students.

An issue identified in the program review was that required courses were not being offered regularly enough to support students' timely graduation. The reviewers also found that the Department needs to work on its assessment of student learning outcomes. Course-specific student learning outcomes need to be established and program-level outcomes need to be expressed in active, measureable terms that provide students with guidance on how they will be expected to demonstrate learning. Direct (formative and summative) measures of assessment need to be completed to measure the outcomes. A final issue arising from the review is the loss of tenured and tenure-track faculty in recent years and the subsequent reliance on adjunct instructors to provide much of the department's instruction.

It is therefore agreed that:

1. The Department will develop course-specific student learning outcomes; will revise and update program level outcomes to be active and measurable; student learning objectives (unique to each program) will be published on the website.
2. The Department will implement an ongoing program of assessment of institutional, programmatic, and student learning outcomes across the curriculum. These should include General Education offerings, the Bachelor's programs, and the Master's Programs. This assessment should also include a revised curriculum map, and a substantive assessment plan detailing "closing the loop" strategies.
3. The Department will review demand for undergraduate and graduate core major requirements on a regular basis and adjust offerings as necessary to allow appropriate degree progression. They will consider offering more evening courses to address the needs of graduate students.
4. The Department will work with the college to establish a hiring plan in areas of disciplinary need.
5. The Department will provide an annual update (due June 1) on progress made towards the actions agreed to in this MOU to the CNSM Dean, the Vice Provost for Academic Programs, and the Director of Program Review and Assessment. The last self-study was originally due 2003, but not submitted until 2006. The current self-study period was also extended, originally due in 2013 but submitted in 2016. Two years will be added from the expected self-study period of 2013-2020 to allow the program time to conduct meaningful assessment. The cycle will therefore be from 2015-2022.
6. The Math Department will follow up on changes made to the placement method of students in Math GE courses and the success of students in those course should be assessed as program level outcomes related to Implementation of EO-1110.


This MOU has been read and approved by:

Department Chair: 
Tangan Gao

Date: 3/27/19

College Dean: 
Curtis Bennett

Date: 3/26/19

Vice Provost Academic Programs: 
Jody Cormack

Date: 3-25-19