

Undergraduate Curricular Program Assessment Plan

Program Name: Math/Stat

Applicable Major(s)/Degree(s): BS in Mathematics; BS in Statistics and Actuarial Science

Date: 2/1/2018

Section 1: Program Learning Outcomes and Assessment Methods

This table summarizes all program learning outcomes and related details for each outcome. Program learning outcomes identify what students will know and do as a result of completing the program.

Program Learning Outcome(s)	Campus SLO Alignment	Assessment Year	Assessment Methods/Measures	Performance Indicators
Demonstrate knowledge of the basic definitions, notation and theorems of mathematics/statistics	1	2018-19	Items from final exams in Math 4201 and Stat 3611	80% of the students who take the exam will score at or above the 80% percentile
Solve problems using statistical/mathematical techniques/models	2	2018-19	Items from final exams in Math 3355 and Stat 5511	80% of the students who take the exam will score at or above the 80% percentile
Critically assess and explain mathematical/statistical arguments	3	2019-20	Items from student work in Math 4326 and Stat 5571	80% of the students who take the exam will score at or above the 80% percentile
Write a coherent description of a mathematical/statistical presentation	6a	2017-18	Papers from Math 3941	90% of the students who write papers will score full points on the paper*

*Papers are scored at a no pass, pass (full points), or extra points (this is a rare occurrence, when the paper is exceptional).

Section 2: Program Assessment Data Analysis and Results

In this section, information is provided regarding who conducts the program's assessment, who compiles assessment data, who reviews assessment results, and general ways the program uses assessment results to improve teaching and learning. Information includes ways in which students and individuals/groups outside of the program are involved in the program's assessment process, if applicable.

The PAL for the Math/Stat Department organizes the assessment process and coordinates the Department's responses. The entire Department reviews assessment data. The Department Head oversees decisions, as well. Assessment is discussed at a minimum at two Department meetings, including the Department Retreat. Improvements include, but are not limited to, coverage of topics, and pedagogy.

Section 3: Alignment of Courses to Program Learning Outcomes

This table lists all courses taught for the program and shows the alignment with the program learning outcomes.

- Courses are listed in order by course level, beginning with 1xxx courses.
- * denotes required courses for both the Mathematics B.S. and the Statistics and Actuarial Science B.S.
- ^ denotes required courses for the Mathematics B.S., which are electives for the Statistics and Actuarial Science B.S.
- # denotes required courses for the Statistics and Actuarial Science B.S., which are electives for the Mathematics B.S.
- Course-to-program learning outcome alignment is noted as: I = Introductory, R = Reinforced, E = Emphasized
- Courses used as part of Program Assessment are noted by: P = Program Assessment Reporting.

Course Number	Course Title	Program Learning Outcomes			
		1	2	3	4
Math 1296	Calculus I	I			
Math 1297*	Calculus II	I			
Math 3280*	Differential Equations with Linear Algebra	R	I		
Math 3298*	Calculus III	R	I		
Math 3355*	Discrete Mathematics	R	E, P	I	I
Math 3941*	Undergraduate Colloquium				E, P
Math 4201^	Elementary Real Analysis	E, P	R	R	I
Math 4326^	Linear Algebra	R	R	E, P (Math)	R
Stat 3611*	Introduction to Probability and Statistics	E, P	R	I	I
Stat 3612 #	Introduction to Probability and Statistics II	E	R	R	R
Stat 5511 #	Regression Analysis	R	E, P	R	R
Stat 5531 #	Probability Models	E	E	E	E
Stat 5571 #	Probability	R	R	E, P (Stat)	R
Stat 5572 #	Statistical Inference	E	E	E	E