Undergraduate Program-Specific Student Learning Outcome and Success Annual Report

I. Program Information

Program/Department: mathematics

Department Chair: jenn berg

Department Assessment Committee Contact: jenn berg

II. Program-Specific Student Learning Outcomes (Educational Objectives)

List ALL Program-Specific SLOs first, and the assessment timeline (annual or bi-annual) for assessing each program SLO.

Program SLO	Expected Timing of assessment (annual, semester, bi-annual, etc.)
1) possess an understanding of the breadth of the mathematical sciences and their deep interconnecting principles. a. demonstrated an understanding of the concept of a function and its related topics. b. demonstrated an understanding of the basic concepts of calculus. c. demonstrated a knowledge of the abstract structures in mathematics. d. demonstrated competency in several mathematical subfields outside of abstract algebra. ε. an understanding of the commonality of different branches of mathematics.	**bi-annually**
2) be able to apply mathematics to a broad spectrum of complex problems and issues by formulating and solving problems. a) demonstrated using mathematics as a tool in solving applied	**biannually**

problems.	
3)be able to read, write, listen, and speak mathematically, as well as to be able to read and understand technically-based materials and to contribute effectively to group efforts.To meet this goal each undergraduate mathematics major has: α. given oral presentations on mathematical topics. (β. demonstrated the ability to write correct proofs. (χ. demonstrated the ability to write expository mathematics. (δ. participated in group assignments or projects (	**biannually**
4) have an understanding of the appropriate use of technology in mathematics. To meet this goal, each undergraduate mathematics major has: a. demonstrated correct use of technology in mathematical situations.	**biannually**
5.) be adequately prepared for a mathematically-oriented career. To meet this goal, each undergraduate mathematics major has: a. demonstrated adequate preparation for his/her postgraduate experience.	**biannually**

I. SLO Assessment (Please report on the SLO's most recently reviewed)

Using the table below, list and briefly describe the direct methods used to collect information assessing whether students are learning the core sets of knowledge (K), skills (S) and attitudes (A) identified as essential.

Dept. SLO #	Assessment description (exam, observation, national standardized exam, oral presentation with rubric, etc.)	When assessment was administered in student program (internship, 4th year, 1st year, etc.)	To which students were assessments administered (all, only a sample, etc.)
none this AY			

IV. Summary of Findings: Briefly summarize the results of the assessments reported in Item III above and how do these compare to the goals you have set?

Other than GPA, what data/ evidence is used to determine that graduates have achieved the stated outcomes for the degree? (e.g., capstone course, portfolio review, licensure examination)	**Who interprets the evidence? What is the process? (e.g. annually by the curriculum committee)**	**What changes have been made as a result of using the data/evidence?**
NA		

V. SSC Data

Indicate a student success performance measure(s) that the department identified as a key measure that it wants to improve. Freshman retention, bottleneck courses, graduation rates, at risk student retention etc.

Student Success Measure (data point from SSC)	Rationale for selection	Planned or Implemented Intervention	Current score/ Target Score
NA			

VI. Phase I Data

Indicate department success performance measure(s) that the department identified as a key measure that it wants to improve (from phase 1 data).

Number of graduates, number of majors, credit production, substitutions etc.

Department Performance Measure (data point from Phase 1)	Rationale for selection	Planned or Implemented Intervention	Current score/ Target Score
NA			

VII. Activities and Adjustments to/Deviation from the Department Assessment Plan

Describe any changes in the assessment plan including new SLOs, new assessments.

I cannot state strongly enough how this form is misaligned with the work the department has done in both major and service assessment. See attached section of self study for more accurate representation of work we are undertaking, much of which is not directly aligned with SLO/SSC/Phase 1 data benchmarks.

The work on mathematics program assessment this year was divided between drafting, submitting, and participating in the five-year program review process; the assessment committee also began redrafting the mathematics program assessment plan.

program review

All members of the department participated in the drafting of the self-study while the steering committee worked on coordinating work and merging disparate drafts and appendix items into one document. The self-study was approved at a department meeting in late February along with potential reviewers; the site visit occurred in early May and the review report was received late May. The department is planning on holding a departmental retreat late in August to use the program review process and draft the five-year plans for change.

assessment plan

The math department assessment committee began work on re-drafting the program assessment plan so that it will better align with the MAA CUPM guidelines. Much progress was made in designing the curriculum map with the MAA SLO's (see attached) and the committee members will have a document to present to the department at the Late-summer retreat. The goal is to have SLO's aligned with courses students take so that we can use student work on courses to assess progress along SLOs in conjunction with the graduating student interviews.

general education

note-departmental activities on the mathematics courses in the general education curriculum are presented under a separate report.