

# Program Assessment Plan

**Department Name: Mathematics**  
**Major: BS APPLIED MATHEMATICS**

**Student Learning Goals:**

1.	Write Mathematically Correct Proofs.
2.	Apply Mathematics to Areas Outside Mathematics.
3.	Apply Probability and Statistics for Modeling and Prediction in Diverse Application Settings.
4.	Master a Significant Body of Mathematics.

**Assessment Plan:**

Assessment Measure:	Goals Addressed: (list by number)	How is the information used?
Final Exam in Math 314	1	<p>The entire process is described in our department assessment plan. In brief, the Outcomes Assessment Committee assembles and analyzes the data at the end of each academic year and makes recommendations to the appropriate committee overseeing a course or portion of the curriculum.</p> <p>If students show an inability to write mathematically correct proofs, the Mathematics Major Committee will examine the curriculum of MATH 187 and MATH 314, the two courses which focus on techniques of proof. Possible remedies include changing the textbook(s), changing the course time table(s) to focus more attention on proof, or a complete change in the applied mathematics major curriculum to focus more attention on proof.</p>
Final Exam in Math 333	2	<p>The Outcomes Assessment Committee assembles and analyzes the data at the end of each academic year. If students are unable to apply mathematics, the Applied Mathematics Committee will examine the curriculum of MATH 333. Possible remedies include changing the textbook, changing the time table to focus more attention on applying mathematics, or considering the addition of a course in mathematical modeling to the program.</p>
Final Exam in Math 361	3	<p>The Outcomes Assessment Committee assembles and analyzes the data at the end of each academic year. If students are unable to apply probability and statistics in application settings, the Applied Mathematics Committee will examine the curriculum of MATH 361 with an eye to directing it in a more applied statistics direction. Possible remedies include changing the textbook, changing the course time table to focus more attention on applying statistics, or requiring another course in statistics of applied mathematics majors.</p>
Major Field Test of the Educational Testing Service	4	<p>The Outcomes Assessment Committee assembles and analyzes the data at the end of each academic year. If a substantial number of graduates test in the bottom half of the national sample, the department as a whole will re-examine the entire curriculum.</p>