

**Department of Mathematical Sciences  
Student Learning Outcomes Assessment Plan  
For the  
Bachelor of Science in Mathematics**

**Date:** March 1999

**Certificate or Degree program:** Bachelor of Science in Mathematics

**Mission:** We shall provide quality undergraduate education responsive to the needs of individual students and the diverse population of Alaska.

**Goal:** To assure that our graduates are adequately prepared to succeed in the job market in mathematics or a closely related field.

<b>INTENDED OUTCOMES/ OBJECTIVES</b>	<b>ASSESSMENT CRITERIA</b>	<b>IMPLEMENTATION PROCEDURES (who, when, what)</b>
1) Students will display effective mathematical skills and background for use in the world of mathematical sciences.	<b>ENTRY LEVEL ASSESSMENT:</b> A) SAT/ACT Mathematics Scores B) High School transcript courses and grades C) College-level transcript courses and grades	<b>ENTRY LEVEL:</b> Admissions will consult department if student declares Math as a major and does not appear ready to matriculate in calculus. Math coordinator will obtain materials to determine if student qualifies for entry into the Math program.
	<b>EXIT LEVEL ASSESSMENT:</b> A) Students' ability to apply knowledge learned in basic courses, such as Math 200, 201, and 202, in higher level mathematics courses, as evidenced a portfolio collected in Math 401.	<b>EXIT LEVEL:</b> Advisor will review students course grades in Math 200, 201 and 202. Written work in classes such as Math 302, 307, 310 and 314 will also be assessed each May by an assessment committee to ensure that background skills have been mastered.
2) Students will display effective written communication skills for use in the world of mathematics.	<b>ENTRY LEVEL ASSESSMENT:</b> A) SAT/ACT verbal scores B) High School transcript English courses and grades.	<b>ENTRY LEVEL:</b> Advisor will use assessment criteria to place students in appropriate English classes to ensure progress towards degree.
	<b>EXIT LEVEL ASSESSMENT:</b> Exposition and proof writing skills as evidenced in Math 308.	<b>EXIT LEVEL:</b> The students' written work shall be reviewed each May by an assessment committee. This committee will generate a report with an aim of ensuring that the

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		students' work satisfies minimum standards.
3) Students will display effective oral communication skills for use in the world of mathematics.	<b>ENTRY LEVEL ASSESSMENT:</b> None	<b>ENTRY LEVEL:</b> None
	<b>EXIT LEVEL ASSESSMENT:</b> Oral presentations in Math 490, the senior seminar.	<b>EXIT LEVEL:</b> Each May an assessment committee shall review the oral presentations.
4) Students will develop technical skills in mathematics.	<b>ENTRY LEVEL ASSESSMENT:</b> A) High School transcript Mathematics courses and grades B) College-level Mathematics courses and grades	<b>ENTRY LEVEL:</b> Advisor will examine assessment materials to determine appropriate placement for student.
	<b>EXIT LEVEL ASSESSMENT:</b> A) ETS Major Field Test in Mathematics B) Exit surveys C) Job placement	<b>EXIT LEVEL:</b> ETS results and exit survey summaries will be reviewed by mathematics faculty to identify strengths and weaknesses in the program. Job placement and salaries indicate employer confidence in program.
	<b>ASSESSMENT OF ALUMNI:</b> A) Alumni Surveys	<b>ALUMNI:</b> Information from Alumni Surveys, including the annual CSEM survey of graduates. Summary information is distributed to mathematics faculty.

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