

Department of Mathematics and Statistics
B.S. and B.A. Degree Assessment
2011-2012

In the 2010-2011 Program Review, the Department of Mathematics and Statistics was asked to provide different outcomes assessment for the undergraduate degrees, BA and BS. This review also suggested eliminating the B.A. altogether. The position of DMS is that the availability of both a B.A. in Mathematics and a B.S. in Mathematics is crucial to students interested in certain double majors even though the mathematics requirements for these two degrees is exactly the same. As of the date of this report, the status of the B.A. in Mathematics is unclear.

In Fall 2012, DMS needs to review the Outcomes Assessment Plan for our undergraduate program and address three items in particular: (a) the change in the degree to include two separate tracks (b) the findings of the 2010-2011 Program Review and (c) the status of the B.A. in Mathematics.

In this round, the most recent plan will be followed.

Objective: Our curriculum will meet national standards.

Procedure: Comparison of UAF program to University of Washington, University of Wyoming, and University of North Dakota.

(<http://www.ets.org/s/mft/pdf/2011/mathematics4amf.pdf>) we find that:

one student earned a perfect score which places it in the top 4%

3 of 11 earned scores in the top 7%

7 of 11 earned scores in the top 25%

10 of 11 earned scores in the top third

Furthermore, when the average scores of these 11 students are split by topic { Calculus, Algebra, Routine, Nonroutine, Applied } the students scored in the top 90%, 94%, 98%, 98%, and 97% respectively.

These scores indicate that our students perform very well compared to math majors at other institutions.

Objective: Our students will have opportunities to develop the necessary skills to achieve their career goals in mathematics.

Procedure: A) Exit survey; B) Alumni survey

Implementation: A) Every spring, the instructor of Math 490, a required course for all math majors, will give all students an exit survey at the end of the course. The assessment committee will summarize results in its annual report.

B) Every 3 years, alumni surveys will be sent to all students who graduated with a degree in mathematics 2,3, and 4 years prior. The assessment committee will summarize results in its annual report.

Status: Exit Interview Data

Number of students: 12

Degree Type: 8 B.S.; 3 B.A.; 1 no answer; 5 double majors; 2 double degrees

Advising: Five students identified an advisor. (Note all 5 students had different advisors.)
Five students had no advisor. Two students described "sort of" advisors.

Status: The Chair of the Department found no problems. He observed that our majors generally performed well academically and have overall and major GPA's of 3.0 or better.