

School of Arts & Sciences Program Learning Outcomes

From: AY17 Assessment Plan

Department: Natural Sciences

Program Group: Mathematics

Degree: B.S. Mathematics

The following program learning outcomes have been identified by the Mathematics Program faculty as being relevant to measuring the potential success of UAS mathematics Bachelor of Science graduates in the workforce or in academics.

1. Competency in Core Subject Content
 - a. Graduates will demonstrate skills in basic quantitative and analytic problem solving and competency in basic undergraduate mathematics coursework.
 - b. Graduates will demonstrate knowledge of foundational theoretical concepts essential to the study of mathematics.
 - c. Graduates will demonstrate an ability to extend and generalize foundational concepts and critically analyze and solve abstract problems in mathematics.
2. Skills in Analysis, Application, and Technology Utilization
 - a. Graduates will demonstrate the ability to use technology as an aid to understanding and solving mathematical problems.
 - b. Graduates will demonstrate the ability to apply mathematical knowledge in new settings and situations.
 - c. Graduates will demonstrate the ability to critically analyze and solve a wide variety of problems using theoretical or technological tools.
3. Communication Skills
 - a. Graduates will demonstrate the ability to read and comprehend mathematical ideas.
 - b. Graduates will demonstrate the ability to communicate mathematical ideas in writing.
 - c. Graduates will demonstrate the ability to communicate mathematical ideas verbally.
4. Professionalism and Independence
 - a. Graduates will produce a resume highlighting marketable mathematical skills and knowledge.
 - b. Graduates will demonstrate confidence in communicating mathematical ideas verbally and in writing.
 - c. Graduates will demonstrate the ability to independently pursue investigations in the mathematical sciences.