

NorthWest Arkansas Community College
Division of Science and Mathematics

Course Number and Title

MATH 1003 Math for AAS General Education

Catalog Description

This course is designed to meet the needs for a college level mathematics course for AAS programs. The course will include a review of basic arithmetic skills such as ratios, proportions, percents, and metric conversions focusing on applications of these topics. The primary focus of the course will include a variety of skills from areas such as financial mathematics, estimation, regression analysis, statistics, math history, and math as art. This is a very application oriented course and is designed to be flexible to accommodate the differing needs of people in various AAS programs.

Prerequisites

Beginning Algebra (MATH 0053, or MATH 0054) with a “C” or better, or appropriate placement scores.

Credit hours/Contact hours/Load hours

3 credit hours / 3 contact hours/ 3 load hours

Target Audience/Transferability

This is a non-transfer course designed to give students in particular AAS programs the math skills they need for their careers, as well as give an overview of many everyday applications of mathematics.

Student Learning Outcomes

This course is designed to help students master the mathematics skills needed to excel in their various careers and to familiarize them with the usefulness of mathematics in everyday life. Emphasis will be placed on students being able to analyze, set up, and solve problems. Students will also be encouraged to think about the reasonableness of their solutions.

A student who is successful in this course should be able to:

- 1) Convert among fractions, decimals, and percents
- 2) Set up and solve ratio and proportion problems
- 3) Convert between English and metric systems
- 4) Read and interpret statistical information from a variety of sources
- 5) Gather data, form scatterplots, fit a regression curve and analyze results
- 6) Use estimation to determine reasonableness of an answer
- 7) Compute payments, present, and future values for loans, annuities, and sinking funds
- 8) Calculate various measures of central tendency and dispersion
- 9) Recognize and apply various geometric formulas
- 10) Use the standard normal curve to analyze information

Topics

- 1) Fractions, decimals and percents
- 2) Ratios and Proportions
- 3) Conversions
- 4) Analysis of data
- 5) Estimation
- 6) Financial Mathematics
- 7) Geometry
- 8) Standard Normal Curves