

NorthWest Arkansas Community College
Division of Science and Mathematics

Course Number and Title

MATH 1003, Survey of Technical Math

Catalog Description

This course is designed to meet the needs for a college level mathematics course for AAS programs. It is recommended that students intending to earn a baccalaureate degree take College Algebra. course will include a review of basic arithmetic skills such as ratios, proportions, percent, and metric conversions focusing on applications of these topics. primary focus of the course may include a variety of skills from areas such as financial mathematics, estimation, regression analysis, statistics, math history, and math as art. is a very application oriented course with a project component and is designed to be flexible to accommodate the differing needs of people in various AAS programs. Some sections have a required EAST lab component to build team and technology skills. A WWW version of this course may be offered in addition to traditional format. Prerequisite: MATH 0053 with a C or better, or MATH 0064 with a C or better, MCTM 1004, or appropriate placement scores. (See Placement Chart).

Prerequisites

MATH 0053 with a C or better, or MATH 0064 with a C or better, MCTM 1004, or appropriate placement score (See Placement Chart)

Credit hours/Contact hours/Load hours

3 credit hour/ 3 contact hour/ 3 load hour

Target Audience/Transferability

This is a non-transfer course designed to give students in various 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 customized to a student's individual academic pursuit. As such, students will be required to demonstrate mastery of a subset of the following learning outcomes identified as necessary to the curriculum of their academic program.

Students who are successful in Special Topics for Math for AAS will demonstrate mastery of a subset of the following learning outcomes:

- 1) Convert among fractions decimals and percents
- 2) Apply ratios and proportions
- 3) Measurement

- 4) Use statistics to analyze information
- 5) Recognize and apply various geometric ideas and formulas
- 6) Apply basic math skills to financial situations
- 7) Investigate the link between mathematics and the arts
- 8) Explore growth and decay described by linear, exponential, and logistic models
- 9) Compute dosage calculations

Topics

1. Analysis of data
2. Standard Normal Curves
3. Geometry
4. Financial Mathematics
5. Math and the Arts
6. Exponential Growth and Decay
7. Unit conversions for the health professions
8. Calculate dosages

Forms of Assessment

Each student learning outcome will be assessed by a proctored test. The questions on each test will be in direct support of the Student Learning Outcomes. The results of these questions and overall student performance will be reported when final grades are turned in.