Northwest Arkansas Community College
(Science and Mathematics Division)

Discipline Code
MATH

Course Number
1003

Course Title
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. This 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, regression analysis, statistics, math history, and math as art. This 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 EMPACTS lab component to build team and technology skills.

Prerequisites
MATH 0053 with a C or better, MTCM 1003, or appropriate placement score (See Placement Chart)

Credit Hours
3 credit hours

Contact hours
45 lecture contact hours

Load hours
3 load hours

Semesters Offered
Fall, Spring

ACTS Equivalent
There is no ACTS equivalent

Grade Mode
A-F

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 percent
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

General Education Outcomes Supported

- Students can achieve mathematical literacy

Standard Practices

Topics list

- Fractions, decimals, percent and applications of same
- Ratio and Proportions
- Measurement
- Analysis of data
- Standard Normal Curves
- Geometry
- Financial Mathematics
- Math and the Arts
- Exponential Growth and Decay
- Unit conversions for the health professions
- Calculate dosages

Assessments

- Each student learning outcome will be assessed by a proctored module test.
- The questions on each module test will be in direct support of the Learning Outcomes.
- The results of these questions and overall student performance will be reported when final grades are submitted.
- Results of these module exams will be used in the General Education Outcome report

Grading guidelines
- At least 70% of the student's final course grade should come from proctored work