

Northwest Arkansas Community College
(Science and Mathematics Division)

Discipline Code

MATH

Course Number

0011

Course Title

Foundations of Workforce Math

Catalog Description

MATH 0011 Foundations of Workforce Math - (F, S, SUM) is a corequisite course for those students who do not meet the prerequisite for MTCM 1003. Topics include foundational math topics not already included in MTCM. Course can only be taken concurrently with MTCM 1003 and cannot be taken alone. Corequisite: MTCM 1003.

Prerequisites

None

Credit Hours

1 credit hour

Contact hours

15 contact hours

Load hours

1 load hour

Semesters Offered

Fall, Spring, and Summer

ACTS Equivalent

None

Grade Mode

A-F

Learning Outcomes

- Perform operations on integers using the order of operations.
- Simplify and evaluate variable expressions.
- Perform operations on fractions, decimals, and percents.
- Find the perimeter and area of rectangles.
- Recognize number sets: compare magnitudes, graph on the real number line.
- Convert units of measure (includes American and Metric systems)

General Education Outcomes Supported

- Students develop higher order thinking skills.
- Students can achieve mathematical literacy.
- Students can employ a variety of sources to locate, evaluate, and use information

Standard Practices

Topics list

Positive and Negative Integers.
Add Positive and Negative Integers.
Subtract Positive and Negative Integers.
Multiply Positive and Negative Integers.
Divide Positive and Negative Integers.
Exponents and Order of Operations.
Understand Variables and Expressions.
Simplify expressions.
Computation with Fractions
Computation with Decimals
Computation with Percents
Perimeter
Area
Number Sets
Magnitude and Order
Graphing
Imperial and Metric System

Learning activities

- Courses must, at a minimum, cover the core learning outcomes for each topic. Faculty may add to these outcomes, but may not omit any of them.
- Since developing student higher order thinking skills and information literacy are essential outcomes of this course, all instructors should include learning activities that develop these outcomes in their courses and identify them in course syllabi. Instructors should describe how these activities will be evaluated in their course syllabi and/or reflected in their gradebooks.

Assessments

- The final is a departmental comprehensive exam. Results of the departmental finals will be submitted to the coordinator as part of course outcome assessment. The test will cover a select number of the core learning outcomes, which will be provided as a study guide.
- In some semesters, a required information literacy assessment will be given with results submitted to the coordinator.

Grading guidelines

- At least 50% of the grade should come from proctored work
- Exams and quizzes should count at least 25% of the overall grade.
- Homework, group activities, and required discussion board activity should count at least 10%.