

MAT 010 – BASIC ALGEBRA IA

8 hrs./wk. – N1 cr.

11/23/1016

BEGINNING WINTER 2017

Catalog Description: This is an intensive review of topics typically found on the basic algebra placement test. A passing grade satisfies the Basic Algebra requirement.

Prerequisite: Appropriate score on a placement test.

Text: Bittinger, Basic Algebra Review (*Custom Edition for County College of Morris*), Pearson

Syllabus

Topics
Addition, Subtraction, Multiplication and Division of Real Number; Order of Operations
Substitution in Algebraic Expression (Evaluation)
Addition, Subtraction, Multiplication and Division of Monomials and Polynomials
Simplification of Terms containing Integer Exponents
Factoring. When Factoring Trinomials, Leading Coefficient is Equal to 1
Solution of Linear Equations and Inequalities in One Variable; Solving Problems involving Percent
Translation of English Phrases into Algebraic Equations and Solving
The Rectangle (Cartesian) Coordinate System and Graphs of Linear Equations, using a Table of Values

A Final Exam will be given on the last day of the course.

Note: The grades awarded will be either “P” (for passing the Final); otherwise, a grade of “F” will be given.

Students are expected to adhere to the policies of the County College of Morris. These can be accessed at www.ccm.edu/academics/academic-policies/.

Statement of Course LEARNING OUTCOMES

- **Manipulate** mathematical operations, such as absolute value and exponentials, and understand and utilize the order of operations and rules of simplification
- **Solve** linear equations involving one variable and apply methodology to word problems
- **Solve** systems of linear equations involving two variables and apply methodology to word problems
- **Perform** proficiently addition, subtraction, and multiplication of polynomials, and division by a monomial
- **Factor** basic quadratic expressions and equations, and apply methodology to word problems