

MAT 007 - FOUNDATIONS OF ALGEBRA

2 hrs./wk. – N2 cr.

5/2020

BEGINNING FALL 2020

Catalog Description: This course integrates topics of arithmetic and introductory algebra, including operations on whole numbers, fractions, decimals, percent and signed numbers, linear equations and inequalities in one variable, operations on polynomials, factoring, integer exponents, and graphing. Students are required to complete a series of laboratory assignments, which are designed to reinforce concepts based on the placement test results.

Prerequisite: Appropriate placement test scores or equivalent.

Text: Martin-Gay, Elayn, *Developmental Mathematics*, 4th Edition, (2020, Pearson).

* Textbook NOT available for purchase.

Required Supplementary Material: MyMathLab Access Code

Syllabus

Modules	Topic
Module 1	Whole Numbers
Module 2	Fractions and Mixed Numbers
Module 3	Decimals
Module 4	Real Numbers and Introduction to Algebra
Module 5	Ratio, Proportion and Percent
Module 6	Equations and Inequalities
Module 7	Graphing Linear Equations
Module 8	Exponents and Polynomials
Module 9	Factoring Polynomials

MAT 007 is intended to prepare students for courses MAT 016 or MAT 120, for which it is a prerequisite.

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**

- **Perform** arithmetic operations and applications of whole numbers, fractions, decimals and percent
- **Simplify** expressions and apply operations on real numbers
- **Solve** linear equations, linear inequalities, and simple applications
- **Perform** addition, subtraction, multiplication and division of polynomials
- **Create and interpret** graphs for linear equations