



Course Name: MAT-007 Foundations of Algebra

Date Updated: 2/2022

Credit Hours/week: 2 hrs./wk.- N2 cr.

BEGINNING: SPRING 2022

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.)

Supplementary Material: MyMathLab Access Code

Syllabus:

Modules	Topics
1	Whole Numbers
2	Fractions and Mixed Numbers
3	Decimals
4	Real Numbers and Introduction to Algebra
5	Ratio, Proportion, and Percent
6	Equalities and Inequalities
7	Graphing Linear Equations
8	Exponents and Polynomials
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: (insert link here)

Statement of Expected 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