



**Course Name: MAT-006 Elements of Algebra**

Date Updated: 2/2022

Credit Hours/week: 2 hrs. Lec, 1 hr, Rec. /wk. - N2 cr.

BEGINNING: SPRING 2022

Catalog Description: Elements of Algebra integrates the fundamental operations of arithmetic and introductory Algebra. It is intended for students whose placement examination indicates a need for a review of arithmetic and basic Algebra skills. Topics include 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. The course incorporates a Support Lab where students will receive personal assistance with problems or questions assigned as homework to supplement the lectures.

Prerequisite: Placement Test Scores

Text: Martin-Gay, Elayn, Developmental Mathematics, 4th Edition, (2020, Pearson) (Text NOT available for purchase)

Supplementary Material: MyMathLab Access Code

Syllabus:

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

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