

MAT 006 – ELEMENTS OF ALGEBRA

2 hrs. Lec, 1 hr. Rec. /wk. – N2 cr.

7/2020

BEGINNING FALL 2020

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.

Required Supplementary Material: MyMathLab Access Code

Syllabus

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

MAT 006 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