Course Name: MAT-016 Intermediate Algebra

Date Updated: 2/2022

Credit Hours/week: 3 hrs./wk.- N3 cr.

BEGINNING: SPRING 2022

Catalog Description: A second-level preparatory algebra course designed to prepare students for credit-level mathematics courses. Covered are selected topics, including systems of linear equations, polynomials, factoring, rational expressions, radicals and solving quadratic equations.

Prerequisite: MAT 006, MAT 007 or equivalent

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

Supplementary Material: MyMathLab Access Code

*Students who completed MAT 006 or MAT 007 during/after Fall 2020, and within 24 months of taking this course, do not need to purchase the access code.

Syllabus:

Chapter	Text Sections	Topics
*9	Sect. 9.3	Solving linear equations
	Sect. 9.4, 9.5	Applications of linear equations
	Sect. 9.7	Solving linear inequalities (no compound inequalities)
10	Sect. 10.1-10.5	Graphing lines, intercepts, slope, equations of lines
12	Sect. 12.1, 12.2	Rules for exponents
	Sect. 12.3-12.7	Operations on polynomials (no missing terms for long division)
13	Sect. 13.1-13.5	Factoring of polynomials
	Sect. 13.6, 13.7	Solving polynomial equations by factoring, applications
11	Sect. 11.1-11.4	Systems of equations, applications
14	Sect. 14.1-14.4	Operations on rational expressions
	Sect. 14.5	Solving rational equations
	Sect. 14.7	Complex Fractions
15	Sect. 15.1-15.4	Evaluating, simplifying and operations on radicals (square roots only)
	Sect. 15.5	Radical equations (square roots only)
	Sect.	**Final Exam**

* For Early and Late 7 Week Hybrid classes: Chapters 9 will be completed independently by the student using the review assignment in MyMathLab.

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

- **Solve** simple linear equations, systems of equations, quadratic equations, rational equations and radical equations
- **Create and interpret** graphs of linear equations, and write equations for lines.
- **Perform** addition, subtraction, multiplication, and division of rational and radical expressions
- **Simplify** complex fractions and radical expressions