Course Name: MAT-026 Intermediate Algebra Express

Date Updated: 2/2022

Credit Hours/week: 1hr. Lec, 1hr. Reci. /wk. - N1 cr.

BEGINNING: SPRING 2022

Catalog Description: This is an intensive review of 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: Appropriate score on a placement test or appropriate multiple measures placement

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

Supplementary Material: MyMathLab 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**

A Final Exam will be given on the last day of the course. Grading: Students must pass the final exam with 70% to pass the class. Students will receive either P or F. Note: P meets students prerequisite requirements for MAT 016. F places students in MAT 016.

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