Required content for MAT 1000/1010 Starting Summer 2019
Martin-Gay, 6th Ed.

Sections in red are excluded.

2.1 Linear equations in one variable
2.2 An introduction to problem solving
2.3 Formulas and problem solving
2.4 Linear inequalities and problem solving
2.5 Compound inequalities (Is this necessary, if we don't do absolute value inequalities?)
2.6 Absolute value equations
2.7 Absolute value inequalities.

3.1 Graphing equations
3.2 Introduction to Functions
3.3 Graphing linear functions
3.4 Slope of a line
3.5 Equations of lines
3.6 Graphing piecewise-defined functions, shifting and reflecting graphs
3.7 Graphing linear inequalities

4.1 Solving systems of equations in two variables
4.2 Solving systems of equations in three variables
4.3 System of equations and problem solving
4.4 Solving systems of equations by matrices
4.5 Systems of linear inequalities

5.1 Exponents and scientific notation (product rule, quotient rule, negative exponents)
5.2 More work with exponents and scientific notation (power rule and review)
5.3 Polynomials and polynomial functions
5.4 Multiplying polynomials
5.5 GCF and factor by grouping
5.6 Factoring Trinomials
5.7 Factoring by special products
5.8 Solving equations by factoring and problem solving

6.1 Rational functions, and multiplying and dividing rational expressions
6.2 Adding and subtracting rational expressions
6.3 Simplifying complex fractions
6.4 Dividing polynomials: Long division and synthetic division
6.5 Solving equations containing rational expressions
6.6 Rational equations and problem solving
6.7 Variation and problem solving

7.1 Radicals and radical functions
7.2 Rational exponents
7.3 Simplifying radical expressions
7.4 Adding, subtracting, and multiplying radical expressions

7.5 Rationalizing denominators and numerators of radical expressions
7.6 Radical equations and problem solving
7.7 Complex numbers (exclude simplifying powers of *i* greater than 2)

8.1 Solving quadratic equations by completing the square
8.2 Solving quadratic equations by the quadratic formula
8.3 Solving quadratic equations by using quadratic methods
8.4 Nonlinear inequalities in one variable
8.5 Quadratic functions and their graphs (Standard form, and translations)
8.6 Further graphing of quadratic functions (general form)

9.1 The algebra of functions; composite functions
9.2 Inverse Functions
9.3 Exponential functions
9.4 Exponential growth and decay functions
9.5 Logarithmic functions
9.6 Properties of logarithms
9.7 Common logarithms, natural logarithms, and change of base
9.8 Exponential and logarithmic equations and problem solving

10.1 The parabola and the circle (Circle only)