

Recommended Course Outline (MW)

Math 99 – Truman College – Fall 2019

Note: Topics are links. Contents for Wednesdays are generally lighter to allow time for quizzes.

	Monday	Wednesday
Week 1	Course Overview, Introduction to Intermediate Algebra, The words And and Or	Introduction to Set Theory (set relations), The Set of all Natural Numbers, Order of Operations on Natural Numbers
Week 2	September 2 – NO CLASS Labor Day Holiday	The Set of all Integers, Square Roots, Order of Operations on Integers, Perimeter and Area of Rectangles
Week 3	Algebraic Expressions and Statements, Factors of a Number, Fractions 1 (the definition), Fractions 2 (equivalent fractions)	Set Operations, Perimeter and Area of Right Triangles, Fractions 3 (mixed numbers and improper fractions), Fractions 4 (adding and subtracting)
Week 4	Linear Equations 1 (One- and Two-Step Equations), Division with Remainder, The nth Root of a Number	Fractions 5 (multiplying and dividing), Basic Percent Problems, Introduction to Number Theory (prime factorization)
Week 5	Simplifying Algebraic Expressions, The Rectangular Coordinate System, LCM and GCD	Exam 1
Week 6	Rules of Exponents, Linear Equations - 2 (unknown on both sides), Graph of an Equation	Multiplying Algebraic Expressions, Fractions and Decimals, Intervals
Week 7	The Zero-Product Rule, Factoring A (GCF and Diff. of Squares Theorem), Graphing a Line	Square-Root of 2 is Irrational, The Real Number System, Absolute Value Equations
Week 8	Radical Expressions 1, Integer Exponents	Exam 2
Week 9	Completing The Square - 1, and 2, More Linear Equations, Linear Inequalities	Systems of Equations: Elimination and Substitution, Rational Expressions 1, Complex Fractions
Week 10	Completing the Square - 3, and 4, Compound Inequalities	Smallest Value of a Quadratic Expression, Combinatorics 1
Week 11	Graphing a Parabola - 1, Summation, The Quadratic Formula	Rational Exponents, Radical Expressions 2, Slope of a Line
Week 12	Graphing a Parabola - 2, The Pythagorean Theorem, More on Linear Systems	Exam 3
Week 13	Writing Equations of Lines, Similar Triangles	Complex Numbers, Rational Expressions 2
Week 14	Radical Equations, Digit Word Problems (Optional)	Rational Equations, Basic Functions
Week 15	Work Word Problems, (Optional) Factoring by the AC Method (Optional)	Systems of Linear Equations with Three Variables
Week 16	Review	Exam 4