

Recommended Course Outline

Math 99 – Truman College – Spring 2020

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

	Tuesday	Thursday
Week 1	Course Overview, Introduction to Intermediate Algebra, The words And and Or	The Set of all Natural Numbers, Order of Operations on Natural Numbers, Perimeter and Area of Rectangles
Week 2	Introduction to Set Theory (set relations), The Set of all Integers, Square Roots, Order of Operations on Integers, Perimeter and Area of Right Triangles,	Factors of a Number, Division with Remainder, Algebraic Expressions and Statements
Week 3	Fractions 1 (the definition), Linear Equations 1 (One- and Two-Step Equations)	Set Operations, Introduction to Number Theory, Fractions 2 (equivalent fractions)
Week 4	Simplifying Algebraic Expressions LCM and GCD, Fractions 3 (mixed numbers and improper fractions), Fractions 4 (adding and subtracting)	Exam 1
Week 5	Fractions 5 (multiplying and dividing), Rules of Exponents, The nth Root of a Number, Linear Equations - 2 (unknown on both sides) Intervals	Multiplying Algebraic Expressions, Basic Percent Problems, The Rectangular Coordinate System
Week 6	Integer Exponents, Graph of an Equation, Graphing a Line, Linear Inequalities	The Zero-Product Rule, Factoring A (GCF and Diff. of Squares Theorem)
Week 7	Systems of Equations: Elimination and Substitution, Summation	Completing The Square - 1, and 2, Rational Expressions 1
Week 8	Square-Root of 2 is Irrational, Fractions and Decimals, The Real Number System	Exam 2
Week 9	Radical Expressions 1, Smallest Value of a Quadratic Expression	Completing the Square - 3, and 4, , The Pythagorean Theorem
Week 10	Graphing a Parabola - 1, Compound Inequalities	Slope of a Line, Combinatorics 1
Week 11	Graphing a Parabola - 2, Rational Exponents	The Quadratic Formula, Similar Triangles
Week 12	Writing Equations of Lines, Radical Expressions 2	Exam 3
Week 13	Absolute Value Equations, Complex Numbers	Complex Fractions, More on Linear Systems, Basic Functions
Week 14	Rational Expressions 2, Rational Equations	Radical Equations, Work Word Problems
Week 15	Factoring by the AC Method (Optional), Functions	Systems of Linear Equations with Three Variables
Week 16	Review	Exam 4

Last revised: January 7, 2020