

Recommended Course Outline (TR)

Math 99 – Truman College – Fall 2019

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

	Tuesday	Thursday
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	The Set of all Integers, Square Roots, Order of Operations on Integers, Perimeter and Area of Rectangles	Algebraic Expressions and Statements, Factors of a Number, Fractions 1 (the definition), Fractions 2 (equivalent fractions)
Week 3	Set Operations, Perimeter and Area of Right Triangles, Division with Remainder, Fractions 3 (mixed numbers and improper fractions), Fractions 4 (adding and subtracting)	Linear Equations 1 (One- and Two-Step Equations), The nth Root of a Number
Week 4	Fractions 5 (multiplying and dividing), Basic Percent Problems, Introduction to Number Theory (prime factorization)	Exam 1
Week 5	Simplifying Algebraic Expressions, Linear Equations - 2 (unknown on both sides)	Rules of Exponents, LCM and GCD, The Rectangular Coordinate System
Week 6	Multiplying Algebraic Expressions, Graph of an Equation, Intervals	The Zero-Product Rule, Factoring A (GCF and Diff. of Squares Theorem), Fractions and Decimals
Week 7	Radical Expressions 1, Integer Exponents,	Completing The Square - 1, and 2, Graphing a Line
Week 8	Square-Root of 2 is Irrational, The Real Number System,	Exam 2
Week 9	Completing the Square - 3, and 4, More Linear Equations, Linear Inequalities	Absolute Value Equations, Systems of Equations: Elimination and Substitution
Week 10	Smallest Value of a Quadratic Expression, Compound Inequalities, Summation	The Quadratic Formula, Combinatorics 1, Rational Expressions 1,
Week 11	Graphing a Parabola - 1, Radical Expressions 2, Slope of a Line	Rational Exponents, The Pythagorean Theorem
Week 12	Graphing a Parabola - 2, More on Linear Systems, Similar Triangles	Exam 3
Week 13	Writing Equations of Lines, Rational Expressions 2, Complex Fractions	Complex Numbers
Week 14	Radical Equations, Basic Functions Digit Word Problems (Optional)	November 28 – NO CLASS Thanksgiving Holiday
Week 15	Work Word Problems, (Optional) Factoring by the AC Method (Optional)	Systems of Linear Equations with Three Variables, Rational Equations
Week 16	Review	Exam 4