

## Recommended Course Outline

### Math 98 – Truman College – Spring 2019

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

	Tuesday	Thursday
week 1	Course Overview, The Language of Mathematics (optional) The Words And and Or	The Set of All Natural Numbers, Order of Operations on Natural Numbers
week 2	Introduction to Set Theory, Factors of a Number	The Set of All Integers, Order of Operations on Integers, Division with Remainder
week 3	Set Operations, Perimeter and Area of Rectangles	Algebraic Expressions and Statements
week 4	Fractions 1 (the definition), Linear Equations 1 (One- and Two-Step Equations), Perimeter and Area of Right Triangles	<b>Exam 1</b>
week 5	Fractions 2 (equivalent fractions), Introduction to Number Theory (prime factorization)	Fractions 3 (mixed numbers and improper fractions), Area of Triangles
week 6	Fractions 4 (adding and subtracting), Simplifying Algebraic Expressions	Fractions 5 (multiplying and dividing), LCM and GCD
week 7	The Rectangular Coordinate System, Linear Equations - 2 (Unknown on Both Sides)	Rules of Exponents, Multiplying Algebraic Expressions
week 8	Review	<b>Exam 2</b>
week 9	Intervals, Graph of an Equation, The Zero-Product Rule	Graphing a Line, Factoring 1 (GCF and -1)
week 10	Factoring 2 (Diff. of Squares Theorem) Linear Inequalities	Integer Exponents, Systems of Equations: Elimination
week 11	Systems of Equations: Substitution Factoring 3: Trial and Error	Linear Equations - Part 3 Square Root of an Integer
week 12	Slope of a Line	<b>Exam 3</b>
week 13	Factoring by Grouping, Rational Expressions	More on Linear Systems, The Pythagorean Theorem
week 14	Factoring by the AC Method	The Sum and Difference of Cubes (optional)
week 15	Fractions and Decimals	Square-Root of 2 is Irrational, The Real Number System
week 16	Final Review	<b>Exam 4</b>