

**Recommended Course Outline**  
**Math 99 – Truman College**

Note: Topics are links.

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

Last revised: January 13, 2023