MATH 11000 Fundamentals of Algebra
Tentative Syllabus

Textbook: either book listed below is suitable for this course

- *Fundamentals of Algebra, Custom Edition for IUPUI*, Bittinger, Ellenbogen & Johnson
- *Elementary & Intermediate Algebra: Concepts & Applications, 5th Ed*; Bittinger, Ellenbogen & Johnson

Note: This document is provides a basic outline of when topics will be covered in this course and may differ slightly from the schedule of your section. Please refer to your instructor-provided syllabus for actual dates and other important information

Week	Topics
1	7.1 Introduction to Functions 7.2 Domain and Range 7.3 Graphs of Functions
2	7.4 The Algebra of Functions 7.5 Variation and Problem Solving
3	Exam #1 8.1 Systems of Equations in Two Variables 8.2 Solving by Substitution and Elimination
4	8.3 Solving Applications: Systems of Two Equations 8.8 Business and Economics Applications
5	9.1 Interval Notation and Problem Solving 9.2 Intersections, Unions, and Compound Inequalities
6	9.3 Absolute-Value Equations 9.4 Inequalities in Two Variables Exam #2
7	10.1 Radical Expressions and Functions 10.2 Rational Numbers as Exponents 10.3 Multiplying Radical Expressions
8	10.4 Dividing Radical Expressions 10.5 Expressions Containing Several Radical Terms 10.6 Radical Equations
9	Exam #3 10.8 The Complex Numbers – imaginary numbers only 11.1 Quadratic Equations

Week	Topics
10	11.2 The Quadratic Formula 11.4 Applications Involving Quadratic Equations 11.6 Quadratic Functions and Their Graphs
11	11.7 More About Graphing Quadratic Functions 11.8 Problem Solving and Quadratic Functions Exam #4
12	12.1 Composite and Inverse Functions 12.2 Exponential Functions 12.3 Logarithmic Functions
13	12.4 Properties of Logarithmic Functions 12.5 Common and Natural Logarithms 12.6 Solving Exponential and Logarithmic Equations
14	12.7 Applications of Exponential and Logarithmic Functions Exam #5
15	Review for Final