

Course Outline

Math 99 BC – Summer 2017

Class 1 – Wednesday, June 7

Lecture: [Course Information](#), [What is Mathematics?](#), [The words AND and OR, Sets, Subsets, Unions and Intersections](#), [The Real Number System - Part 1](#),
Also defined: rectangles and squares, divisibility

Also posted: [Review for Quiz 1](#)

Class 2 – Thursday, June 8

Lecture: [Order of Operations](#), [Division by Zero](#), [Integers](#), Absolute Value of an Integer, [The nth Root of a Number](#), Combinatorics 1 - the handshake problem, [Square-root of 2 is irrational](#), [The Real Number System - Part 2](#), Division with Remainder

Class 3 – Monday, June 12

Lecture: [Combinatorics 1](#), [Number Theory 1](#), [Evaluating Algebraic Expressions](#), [Solutions of Equations and Inequalities](#)

Also posted: [Review for Quiz 2](#)

Class 4 – Wednesday, June 14

Lecture: [Least Common Multiple and Greatest Common Divisor of Two Numbers](#), [Review of Fractions](#), (Careful when printing this! It's 85 pages long.) [One- and Two-Step Equations](#), Conditional Equations, Identities, and Contradictions

Class 5 – Thursday, June 15

Lecture: [Simplifying Algebraic Expressions](#), [Review of Linear Equations](#) (and [Practice](#))

Also posted: [Review for Quiz 3](#), [Review for Exam 1](#)

Class 6 – Monday, June 19

Lecture: [The Zero Product Rule](#), [Factoring A](#) (GCF and difference of squares theorem), [Fractions and Decimals](#)

Class 7 – Wednesday, June 21

Lecture: [Decimal Presentation of Rational and Irrational Numbers](#),
Completing the Square – [Part 1](#), [Part 2](#), [Rules of Exponents](#)

Class 8 – Thursday, June 22

Lecture: [Summation 1](#)

Exam 1

Also posted: [Review for Quiz 4](#)

Class 9 – Monday, June 26

Lecture: [Radical Expressions 1](#), [Basic Percent Problems](#), [The Rectangular Coordinate System](#)

Class 10 – Wednesday, June 28

Lecture: [Word Problems 1](#), [Intervals](#), More Percents ([Worksheet](#)),
[The Smallest Value of a Quadratic Expression](#)

Also posted: [Review for Quiz 5](#)

Class 11 – Thursday, June 29

Lecture: [Graph of an Equation](#), [Graphing Straight Lines 1](#), [Graphing Parabolas 1](#) and [Practice](#),
[The Pythagorean Theorem](#)

Also posted: [Exam 2 Review](#)

Class 12 – Monday, July 3

Lecture: Completing the Square – [Part 3](#), [Area](#), More on Factoring

Class 13 – Wednesday, July 5

Lecture: [Radical Expressions 2](#), Completing the Square – [Part 4](#), [Integer Exponents](#)

Class 14 – Thursday, July 6

Lecture: [The Quadratic Formula](#)

Exam 2

Also posted: [Review for Quiz 6](#)

Class 15 – Monday, July 10

Lecture: [The Slope of a Line](#), [Solving Systems by Elimination](#), [Solving Systems by Substitution](#),
Number Theory 2

Class 16 – Wednesday, July 12

Lecture: [Functions](#), [Absolute Value Equations](#), [Radical Equations](#), Combinatorics 2,

Also posted: [Review for Quiz 7](#)

Class 17 – Thursday, July 13

Lecture: Rational Exponents - Part 1, Combinatorics 2, [Graphing Parabolas 2](#)

Class 18 – Monday, July 17

Lecture: [Digit Problems](#), [Linear Inequalities](#), [Compound Inequalities](#), [Rational Exponents](#),
[Writing Equations of Lines](#)

Also posted: [Review for Quiz 8](#)

Class 19 – Wednesday, July 19

Lecture: [Rational Expressions](#), [Basic Motion Problems](#), [Complex Numbers](#)

Also posted: [Review for Quiz 9](#)

Class 20 – Thursday, July 20

Lecture: [Rational Equations](#), [Complex Fractions](#), [Similar Triangles](#),
[Arithmetic, Geometric, and Harmonic Means](#)

Also posted: [Final Review](#)

Class 21 – Monday, July 24

Lecture: [Mixture Problems](#), [Solving 3 by 3 System of Equations](#),
Factoring over Z: [Factoring by Grouping](#), [Factoring by the AC method](#) (more [practice](#))

Class 22 – Wednesday, July 26

Lecture: Final Review, [Work Word Problems](#), [Motion Problems](#), More on Combinatorics

Class 23 – Thursday, July 27

Exam 3 (same as the Final Exam)