

Course Outline

Math 143 GH – Fall 2018

Class 1 – Tuesday, August 28

Lecture: [Simplifying Algebraic Expressions](#), [Review of Equations](#), [Fractions and Decimals](#),
[Real Numbers - Part 1](#)

Class 2 – Thursday, August 30

Lecture: [The Zero Product Rule](#), [Factoring A](#), [Radical Expressions](#)

Also posted: [Graphing Lines](#), [Exponents 1](#), [Quiz 2 Review](#)

Class 3 – Tuesday, September 4

Lecture: [Completing the Square 1, 2, 3](#), [Factoring 1](#), [The nth Root of a Number](#), [Introduction to Construction](#)

Class 4 – Thursday, September 6

Lecture: [Triangle Inequality](#), [The Pythagorean Theorem](#)

Also posted: [Quiz 4 Review](#), Systems of equations [by substitution](#), [by elimination](#), [Linear Word Problems](#)

Class 5 – Tuesday, September 11

Lecture: [Completing the Square - part 4](#), [The Smallest Value of a Quadratic Expression](#), [Graph of a Parabola 1](#),
[Inequality and Interval Notation](#), [Integer Exponents](#)

Class 6 – Thursday, September 13

Lecture: [Introduction to Combinatorics](#), [Similar Triangles](#), [Graphical Solutions](#),

Also posted: [Linear Inequalities](#), [Complex Fractions](#), [Exam 1 Information](#), [Exam 1 Review](#)

Class 7 – Tuesday, September 18

Lecture: Review for Exam 1, [Graph of a Parabola - Part 2](#), [Non-Linear Systems](#), [Functions](#),
Introduction to Sets: [Part 1](#) and [Part 2](#)

Also posted: [Quiz 6 Review](#)

Class 8 – Thursday, September 20

Exam 1

Class 9 – Tuesday, September 25

Lecture: [Thales's Theorem](#), [Optimization 1](#), [Quadratic Inequalities](#), [Right Triangle Trigonometry](#)

Class 10 – Thursday, September 27

Lecture: [Right Triangle Trigonometry](#), [Similar Triangles](#), [Graphical Solutions](#),
[Trigonometric Function Values of Famous Angles](#)

Also posted: [Quiz 8 Review](#)

Class 11 – Tuesday, October 2

Lecture: [Writing Equations of Lines](#), [Circles - Part 1](#), [Simplifying Trigonometric Expressions](#), [Summation 1](#)

Class 12 – Thursday, October 4

Lecture: [Rational Exponents](#), [Computing Trigonometric Expressions](#), [Domain of Functions](#), [The Quadratic Formula](#)

Also posted: [Quiz 10 Review](#)

Class 13 – Tuesday, October 9

Lecture: [Rotational Angles](#), [Logarithms 1](#), [Basic Exponential and Logarithmic Expressions](#)

Class 14 – Thursday, October 4

Lecture: [Unit Circle Trigonometry](#), [Radical Equations](#), [Circles - Part 2](#)

Also posted: [Exam 2 Information](#), [Exam 2 Review](#)

Class 15 – Tuesday, October 16

Lecture: [Trigonometric Identities 1](#), [Induction](#)

Class 16 – Thursday, October 18

Exam 2

Also posted: [Quiz 12 Review](#)

Class 17 – Tuesday, October 23

Lecture: [Basic Functions](#), [Symmetries of the Unit Circle](#), [Trigonometric Equations 1](#),
[Graphing Trigonometric Functions](#)

Class 18 – Thursday, October 25

Lecture: [Logarithms 1.5](#), [Trigonometric Identities 2](#), [Radian Measure](#), [Arcs and Sectors in Circles](#),
[Rational Inequalities](#)

Also posted: [Quiz 14 Review](#)

Class 19 – Tuesday, October 30

Lecture: [Logarithms 2](#), [Trigonometric Equations 2](#)

Class 20 – Thursday, November 1

Lecture: [Proof of the Sum Formulas](#), [Compound Angle Identities](#), [Inverse Functions](#),

Also posted: [Quiz 16 Review](#)

Class 21 – Tuesday, November 6

Lecture: [Trigonometric Identities 4](#), [Trigonometric Equations 3](#), [Summation 2](#), [Vectors 1](#), [Law of Sines - Part 1](#)

Class 22 – Thursday, November 8

Lecture: Tangent Lines to Parabolas [By Completing the Square](#), [Using the Discriminant](#)

Also posted: [Exam 3 Information](#), [Exam 3 Review](#)

Class 23 – Tuesday, November 13

Lecture: Exam 3 Review, [Vectors 2](#), [Graphing Polynomials - 1](#)

Class 24 – Thursday, November 15

Exam 3

Class 25 – Tuesday, November 20

Lecture: [Exponential Equations](#), [Trigonometric Equations 4](#), [Graphing the Reciprocal of a Function](#)

Also posted: [Quiz 20 Review](#)

Class 26 – Tuesday, November 27

Lecture: [Law of Sines - Part 2](#), [Graphing Polynomials - 2](#), [Inverse Trigonometric Functions](#),
[Trigonometric Equations 5](#)

Class 27 – Thursday, November 29

Lecture: [Complex Numbers](#), [Solving Triangles](#), [Discontinuities of Rational Functions](#)

Also posted: [Quiz 22 Review](#), [Division of Polynomials](#) , [Final Exam Information](#), Final Review: [Version A](#)

Class 28 – Tuesday, December 4

Lecture: [Remainder Theorem](#), [Half-Angle Formulas](#), [Inverse Trigonometric Expressions](#), [Vectors 3](#)

Class 29 – Thursday, December 6

Lecture: [Vectors](#), [Product-Sum Identities](#), [Transformations on Graphs](#)

Class 30 – Tuesday, December 11

Lecture: [Graphing Trigonometric Functions \(practice\)](#), [Graphing Rational Functions](#),
[Polar Form of Complex Numbers](#)

Class 31 – Wednesday, December 13

Final Exam (same as Exam 4)