

# Course Outline

## Math 143 EN – Fall 2017

### Class 1 – Monday, August 28

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

### Class 2 – Wednesday, August 30

Lecture: [Factoring A](#), [Completing the Square 1, 2, 3](#), [Factoring 1](#)

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

### Class 3 – Wednesday, September 6

Lecture: [The nth Root of a Number](#), [Radical Expressions](#), [Completing the Square - part 4](#)

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

### Class 4 – Monday, September 11

Lecture: [Introduction to Construction](#), [Triangle Inequality](#), [The Pythagorean Theorem](#),  
[The Smallest Value of a Quadratic Expression](#), [Graph of a Parabola 1](#), [Inequality and Interval Notation](#)

### Class 5 – Wednesday, September 13

Lecture: [Graphical Solutions](#), [Integer Exponents](#), [Complex Fractions](#), [The Real Number System](#)

Also posted: [Quiz 6 Review](#), [Linear Inequalities](#)

### Class 6 – Monday, September 18

Lecture: [Graph of a Parabola - Part 2](#), [Similar Triangles](#), [Introduction to Combinatorics](#)

### Class 7 – Wednesday, September 20

Lecture: [Optimization 1](#), [Quadratic Inequalities](#)

Also posted: [Exam 1 Information](#), [Exam 1 Review](#)

### Class 8 – Monday, September 25

Lecture: Review for Exam 1, [Factoring 2](#), [Writing Equations of Lines](#), [Circles - Part 1](#)

### Class 9 – Wednesday, September 27

Exam 1

Also posted: [Quiz 8 Review](#)

**Class 10 – Monday, October 2**

**Lecture:** [Non-Linear Systems](#), [Functions](#), [Domain of Functions](#), [Right Triangle Trigonometry](#)

**Class 11 – Wednesday, October 4**

**Lecture:** [Circles - Part 2](#), [Trigonometric Function Values of Famous Angles](#), [Summation 1](#)

**Also posted:** [Quiz 10 Review](#)

**Class 12 – Monday, October 9**

**Lecture:** [Simplifying Trigonometric Expressions](#), [Rational Exponents](#), [Computing Trigonometric Expressions](#), [Logarithms 1](#)

**Class 13 – Wednesday, October 11**

**Lecture:** [The Quadratic Formula](#), [Radical Equations](#)

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

**Class 14 – Monday, October 16**

**Lecture:** Midterm Review, [Basic Exponential and Logarithmic Equations](#), [Rotational Angles](#), [Arithmetic Sequences](#)

**Class 15 – Wednesday, October 18**

**Exam 2**

**Also posted:** [Quiz 12 Review](#)

**Class 16 – Monday, October 23**

**Lecture:** [Logarithms 1.5](#), [Arithmetic, Geometric, and Harmonic Means](#), [Trigonometric Identities 1](#), [Induction](#)

**Class 17 – Wednesday, October 25**

**Lecture:** [Induction](#), [Unit Circle Trigonometry](#)

**Also posted:** [Quiz 14 Review](#)

**Class 18 – Monday, October 30**

**Lecture:** [Rational Inequalities](#), [Another Method](#), [Symmetries of the Unit Circle](#), [Radian Measure](#), [Trigonometric Equations 1](#)

**Class 19 – Wednesday, November 1**

**Lecture:** [Basic Functions](#), [Logarithms 2](#)

**Also posted:** [Quiz 16 Review](#)

**Class 20 – Monday, November 6**

**Lecture:** [Logarithms 2](#) (finished), [Proof of the Sum Formulas](#) , [Compound Angle Identities](#)

**Class 21 – Wednesday, November 8**

**Lecture:** [Trigonometric Identities 2](#), [Trigonometric Identities 4](#), [Trigonometric Equations 2](#),  
[Trigonometric Equations 3](#), [Graphing Trigonometric Functions](#)

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

**Class 22 – Monday, November 13**

**Lecture:** Review for Exam 3, Tangent Lines to Parabolas – [By Completing the Square](#), [Using the Discriminant](#)

**Class 23 – Wednesday, November 15**

**Exam 3**

**Also posted:** [Quiz 18 Review](#)

**Class 24 – Monday, November 20**

**Lecture:** [Graphing Polynomials - 1](#), [Law of Sines - Part 1](#), [Exponential Equations](#), [Vectors 1](#)

**Class 25 – Wednesday, November 22**

**Lecture:** [Arcs and Sectors in Circles](#), [Inverse Functions](#), [Vectors 2](#), [Complex Numbers](#)

**Also posted:** [Quiz 20 Review](#)