

Course Outline - Math 143

Fall 2011

Class 1 - Tuesday, August 23

Lecture: Course Information ([Syllabus](#), [Textbook Info](#), [Calculator Info](#))
[Decimals and Fractions](#), Review of algebra topics

Homework: [Questions](#)

Also posted: Lecture Notes for your own review: [Solving Linear Equations](#), [Exponents 1](#),
[More equations](#) (practice)

Class 2 - Thursday, August 24

Lecture: Completing the square ([Part 1](#), [Part 2](#), [Part 3](#)), [Factoring 1](#), [The Pythagorean Theorem](#)

Also posted: [Quiz 1 Review](#), [Graphing Straight Lines](#), [Linear Word Problems](#)

Class 3 - Tuesday, August 30

Lecture: [Radical Expressions](#), [Completing the square - part 4](#), [Graph of a parabola 1](#),

Homework: [Factoring 2](#) and [Wordproblems 2](#)

Also posted: [Quiz 2 Review](#), [Extra Credit Assignment 3](#)

Class 4 - Thursday, September 1

Lecture: [Similar Triangles](#), [Writing equations of lines](#), [Graph of a parabola 2](#)

Also posted: [Quiz 3 Review](#), Solving systems of equations [by elimination](#) and [by substitution](#)
[Extra Credit Assignment 4](#)

Class 5 - Tuesday, September 6

Lecture: [Quadratic Inequalities](#) (1.7), [Circles - Part 1](#) (1.8, 1.10 exercise 64)

Also posted: [Basic Percent Problems](#)

Class 6 - Thursday, September 8

Lecture: [Optimization 1](#) (3.1), [Non-linear systems](#) (10.8)

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

Class 7 - Tuesday, September 13

Lecture: [The quadratic formula](#), Sequences, the Fibonacci Sequence (12.1)

[Arithmetic Sequences](#) (12.2), Right triangle trigonometry

Also posted: [Quiz 4 Review](#), [Extra Credit Assignment 5](#)

Class 8 - Thursday, September 15

Exam 1

Also posted: [Quiz 5 Review](#)

Class 9 - Tuesday, September 20

Lecture: [Arithmetic Sequences](#) (12.2), [Right triangle trigonometry](#) (6.2), [Radical Equations](#) (1.5)

Also posted: [Quiz 6 Review](#), [Extra Credit Assignment 6](#)

Class 10 - Thursday, September 22

Lecture: [Sectors and arcs](#), [Basic Trigonometric Identities](#) (7.1)

Also posted: [Quiz 7 Review](#)

Class 11 - Tuesday, September 27

Lecture: [Domains of functions](#), Review of exponents, [Circles 2](#)

Also posted: [Quiz 8 Review](#)

Class 12 - Thursday, September 29

Lecture: Angle Measure (6.1), [Logarithms 1](#) (4.3)

Also posted: [Quiz 9 Review](#)

Class 13 - Tuesday, October 4

Lecture: [Logarithms 1](#) (4.3), Unit circle definition of trigonometric functions (5.2)

Class 14 - Thursday, October 6

Lecture: [Basic Functions](#)

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

Class 15 - Tuesday, October 11

Lecture: Review for Exam 2,
[Symmetries of the unit circle](#), [Trigonometric Identities 2](#), [Trigonometric Equations 1](#)

Class 16 - Thursday, October 13

Exam 2

Also posted: [Quiz 11 Review](#)

Class 17 - Tuesday, October 18

Lecture: Transformations on functions (2.5), [Trigonometric Equations 2](#) (7.4, 7.5)

Also posted: [Quiz 12 Review](#)

Class 18 - Thursday, October 20

Lecture: [Logarithms 2](#) (4.3, 4.4)

Also posted: [Quiz 13 Review](#)

Class 19 - Tuesday, October 25

Lecture: [Logarithms 2](#) (4.3, 4.4), the number e

Also posted: [Quiz 14 Review](#)

Class 20 - Thursday, October 27

Lecture: [Sum and Double-Angle Formulas](#) (7.2, 7.3)

Also posted: [Quiz 15 Review](#)

Class 21 - Tuesday, November 1

Lecture: [The Difference Formulas](#) (7.2), [Rational Inequalities](#) (1.7)

Class 22 - Thursday, November 3

Lecture: Trigonometric graphs (5.3), [Exponential Equations](#) (4.5)

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

Class 23 - Tuesday, November 8

Lecture: Geometric sequences (12.3), [Limits at Infinity](#) (13.1, 13.2), Division of polynomials (3.3)

Class 24 - Thursday, November 10

Exam 3

Also posted: [Quiz 17 Review](#)

Class 25 - Tuesday, November 15

Lecture: Product-sum and sum-product identities (7.3), Half-Angle identities (7.3)
Limits at infinity ([part 1](#), [part 2](#)) [Sum of infinite geometric sequences](#) (12.3)

Also posted: [Quiz 18 Review](#)

Class 26 - Thursday, November 17

Lecture: [End-behavior of rational functions](#) (3.7),
discontinuities of rational functions: Holes and vertical asymptotes (3.7)
Another way to multiply polynomials, Law of sines (6.5), Law of cosines (6.6) - [practice](#)

Also posted: [Quiz 19 Review](#)

Class 27 - Tuesday, November 22

Lecture: Graphing cubic polynomials, basic rational functions, [Inverse functions](#) (2.7)

Also posted: [Quiz 20 Review](#)

Class 28 - Tuesday, November 29

Lecture: Taking the reciprocal of a graph, [Graphing factored polynomials](#) (3.2)

Also posted: [Exam 4 Information](#), [Exam 4 Review](#), [Extra Credit Assignment 8](#)

Class 29 - Thursday, December 1

Lecture: [Graphing rational functions](#) (3.7)

Class 30 - Tuesday, December 6

Lecture: Graphing trigonometric functions (5.3, 5.4), [Inverse Trigonometric Expressions](#) (5.5)
Inverse trigonometric functions and their graphs (5.5)
Final Review

Class 31 - Thursday, December 8

Final Exam