

Course Outline

Math 99 DE – Fall 2016

Class 1 – Monday, August 29

Lecture: [Course Information](#), the Set of all Natural Numbers, Square Root of a Natural Number, Factors of a Natural Number, [Order of Operations](#)

Homework: Read the syllabus, and start working on Getting Started with [MyOpenMath](#)

Class 2 – Wednesday, August 31

Lecture: [Evaluating Algebraic Expressions](#), [Integers](#), Absolute Value of an Integer, [Solutions of Equations](#), Division by Zero

Class 3 – Wednesday, September 7

Lecture: [Area](#) and Perimeter of a Rectangle, the words AND and OR in Mathematics, Inequalities, Prime Factorization, The Greatest Common Factor (GCF) and Least Common Multiple (LCM) of two numbers

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

Class 4 – Monday, September 12

Lecture: [Review of Fractions](#), [the Real Numbers – Part 1](#), [Square-root of 2 is irrational](#)

Class 5 – Wednesday, September 14

Lecture: [Area of Right Triangles](#), [Two-Step Equations](#), [Basic Percent Problems](#)

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

Class 6 – Monday, September 19

Lecture: [The Real Numbers](#), [Area of General Triangles](#), [Linear Equations](#), [More Linear Equations](#)

Class 7 – Wednesday, September 21

Lecture: [The Zero Product Rule](#), [Simplifying Algebraic Expressions](#), [More Linear Equations](#), More Percents

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

Class 8 – Monday, September 26

Lecture: Review for Exam 1, [Factoring - Part 1](#) (GCF and factoring out 1), [Factoring - Part 2](#) (The difference of squares theorem), [Fractions and Decimals](#)

Class 9 – Wednesday, September 28
Exam 1

Class 10 – Monday, October 3

Lecture: Completing the Square – [Part 1](#), [Part 2](#), [Rules of Exponents](#), [Area of a Parallelogram](#)

Class 11 – Wednesday, October 5

Lecture: The Rectangular Coordinate System, [Radical Expressions](#), More Divisibility

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

Class 12 – Monday, October 10

Lecture: Completing the Square – [Part 3](#), [Part 4](#),
finished [Radical Expressions](#) (rationalizing denominators), More divisibility

Class 13 – Wednesday, October 12

Lecture: [Graphing Straight Lines](#), [Integer Exponents](#)

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

Class 14 – Monday, October 17

Lecture: Finished [Integer Exponents](#), [Word Problems 1](#)

Class 15 – Wednesday, October 19

Exam 2

Class 16 – Monday, October 24

Lecture: [Solving Systems by Elimination](#), [Solving Systems by Substitution](#),
[Graphing Parabolas 1](#) and [Practice](#)

Class 17 – Wednesday, October 26

Lecture: [Rational Expressions 1](#), [Linear Inequalities](#), [Summation 1](#)

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

Class 18 – Monday, October 31

Lecture: [Linear Word Problems](#) (Investment Problems), [Compound Inequalities](#), [Digit Problems](#)

Class 19 – Wednesday, November 2

Lecture: [The Pythagorean Theorem](#)

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

Class 20 – Monday, November 7

Lecture: [The Pythagorean Theorem](#) (finished), [Factoring by Grouping](#),
[Factoring by the AC method](#) (more practice)

Class 21 – Wednesday, November 9

Lecture: [Absolute Value Equations](#), Slope ([Graphing Straight Lines](#))

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

Class 22 – Monday, November 14

Lecture: Exam 3 Review, [Rational Expressions 2](#), [Complex Fractions](#), [Functions](#)

Class 23 – Wednesday, November 16

Exam 3

Class 24 – Monday, November 21

Lecture: [Rational Exponents](#), [Writing Equations of Lines](#), [The Quadratic Formula](#), [Basic Motion Problems](#)

Class 25 – Wednesday, November 23

Lecture: [Graphing Parabolas 2](#), [Motion Problems](#), [Mixture Problems](#),
Independent and Inconsistent systems

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

Class 26 – Monday, November 28

Lecture: [Rational Equations](#), [Work Problems](#), [Radical Equations](#)

Class 27 – Wednesday, November 30

Lecture: [Similar Triangles](#)

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

Class 28 – Monday, December 5

Lecture: [Complex Numbers](#), One more motion problem

Also posted: [Final Review](#) (departmental)

Class 29 – Wednesday, December 7

Lecture: [Solving 3 by 3 System of Equations](#), [Cantor's Diagonal Argument \(video\)](#)

Also posted: [Final Review \(Version B\)](#)

Class 30 – Monday, December 12

Lecture: Final Review, [Factoring the Sum and Difference of Cubes](#), [Basic Functions and their Properties](#)

Class 31 – Wednesday, December 14

Final Exam (same as Exam 4)