

Course Outline - Math 204

Fall 2009

Class 1 - Monday, August 24

Lecture: Course Information ([Syllabus](#), [Textbook Info](#), [Calculator Info](#))
[The real number system](#) (A.1)
[Decimals and Fractions](#) (A.1)

Homework: [Questions](#)

Also posted: Lecture Notes for your own review
[Solving Linear Equations](#), [Basic Percent Problems](#), and [Wordproblems](#)

Class 2 - Wednesday, August 26

Lecture: Completing the square ([Part 1](#), [Part 2](#), [Part 3](#))
Functions (1.1)

Homework: [Problem Set 1](#)

Also posted: [Quiz 1 Information](#), [Factoring 1](#), [Wordproblems 2](#)

Class 3 - Monday, August 31

Lecture: Functions (1.1)
The Graph of a Function (1.2)
Linear Functions (1.3, [handout](#))

Extra Credit Assignment: If an object travels from A to B with an average speed of v_1 and from B to A with an average speed of v_2 , what is the object's average speed for the entire round trip?

Also posted: Lecture Notes for your own review: [Radical Expressions](#), [Graphing a parabola](#)

Class 4 - Wednesday, September 2

Lecture: Functional Models (1.4, [handout](#))

Homework: [Problem Set 2](#)

Class 5 - Wednesday, September 9

Lecture: [Limits at infinity](#) (1.5)
The definition of e (4.1)

Also posted: [Quiz 2 Information](#), completing the square - [Part 4](#)

Class 6 - Monday, September 14

Lecture: One-sided limits and continuity (1.6)

Class 7 - Wednesday, September 16

Lecture: [Quadratic Inequalities](#)
The instantaneous velocity as a limit

Also posted: [Exam 1 Information](#), [Answers for Problem Set 1](#), [Answers for Problem Set 2](#)

Class 8 - Monday, September 21

Lecture: Exam 1 Review

Class 9 - Wednesday, September 23

Exam 1

Class 10 - Monday, September 28

Lecture: [The Derivative](#) (2.1)

Also posted: [Quiz 3 Information](#)

Class 11 - Wednesday, September 30

Lecture: Review of exponents (A.1)

[Logarithms](#) (4.2)

Graphing rational functions

Homework: [Problem Set 3](#)

Also posted: [Quiz 4 Information](#)

Class 12 - Monday, October 5

Lecture: Inverse Functions (1.1)

Increasing and Decreasing Functions; Relative Extrema (3.1)

Class 13 - Wednesday, October 7

Lecture: Exponential Functions (4.1)

[Logarithms 2](#) (4.2)

Graphing rational functions

Differentiating logarithmic functions (4.3)

Also posted: [Optimization 2](#), [Exam 2 Information](#), [Answers to Problem Set 3](#)

Class 14 - Monday, October 12

Lecture: Review for Exam 2

Rational Inequalities

Class 15 - Wednesday, October 14

Exam 2

Class 16 - Monday, October 19

Lecture: The product rule (2.3)

The second derivative test

Class 17 - Wednesday, October 21

Lecture: [Graphing factored polynomials](#)

The Chain Rule (2.4)

Also posted: [Quiz 6 Information](#), [Differentiation 2](#)

Class 18 - Monday, October 26

Lecture: The quotient rule (2.3)

Differentiating exponential functions (3.3)

Class 19 - Wednesday, October 28

Lecture: Concavity and Points of Inflection (3.2)

Curve Sketching (3.3)

Homework: [Problem Set 4](#)

Also posted: [Quiz 7 Information](#), [Worksheet for sketching the antiderivative](#)

Class 20 - Monday, November 2

Lecture: Riemann sums (5.3)

Class 21 - Wednesday, November 4

Lecture: Riemann sums (5.3)

Also posted: [Exam 3 Information](#), [Answers for Problem Set 4](#)

Class 22 - Monday, November 9

Lecture: [Definite Integrals](#) (5.3)

Review for exam 3

Class 23 - Wednesday, November 11

Exam 3

Class 24 - Monday, November 16

Lecture: Implicit Differentiation (2.6)

[Integration by Substitution](#) (5.2)

Class 25 - Wednesday, November 18

Lecture: L'Hôpital's Rule (A.3)

[Improper Integrals](#) (6.3)

Also posted: [Quiz 9 Information](#)

Class 26 - Monday, November 23

Lecture: [Integration by Parts](#) (6.1)

Class 27 - Wednesday, November 25

Lecture: [Applying definite integrals](#) (5.4)

Class 28 - Monday, November 30

Lecture: [Graphing rational functions](#)

Also posted: [Exam 4 Information](#), [Exam 4 Review](#)

Class 29 - Wednesday, December 2

Lecture: Final Review

Class 30 - Monday, December 7

Lecture: Final Review

Class 31 - Wednesday, December 9

Final Exam