

Math 208 - Calculus 2 - Spring 2014

Course Outline

Class 1 – Tuesday, January 14

Lecture: Review of differentiation and integration
Also posted: [Are you ready for calculus 2?](#) and [Solutions Review of Trigonometric Functions](#)

Class 2 – Thursday, January 16

Lecture: Differentiating inverse functions
[Differentiating trigonometric functions](#) (3.5, 3.9)
Also posted: [Differentiation](#) (practice)
Homework: Fill out this online [Questionnaire](#)
Also posted: [Quiz 1 Information](#)

Class 3 – Tuesday, January 21

Lecture: [The Fundamental Theorem of Calculus](#) (5.4)
[Logarithmic and Exponential Functions](#) (7.1, 7.2)
Also posted: [Basic Integration Formulas](#), [Differentiation 2](#)

Class 4 – Thursday, January 23

Lecture: [Integrating by Substitution](#) (5.5), [Hyperbolic Functions](#) (7.3)
Also posted: [Quiz 2 Information](#)

Class 5 – Thursday, January 30

Lecture: [Integrating trigonometric functions](#) (8.2), [Integration by parts](#) (8.1)
Also posted: [Quiz 3 Information](#), [Trigonometric Formulas](#)

Class 6 – Tuesday, February 4

Lecture: [Trigonometric substitutions](#) (8.3), [Partial Fractions](#) (8.4)

Class 7 – Thursday, February 6

Lecture: [L'Hôpital's Rule](#) (7.5)
Also posted: [Integrals](#) (practice) and [Quiz 4 Information](#)

Class 8 – Tuesday, February 11

Lecture: [Improper Integrals](#) (8.7), [Applications of the Definite Integral](#) (5.6)
Also posted: [Virtual Class](#)

Class 9 – Thursday, February 13

Lecture: [Riemann Sums](#) (5.2, 5.3), [Numerical Integration](#) (8.6)
Also posted: [Exam 1 Information](#)

Class 10 – Tuesday, February 18

Lecture: [Numerical Integration](#) (8.6), Review for Exam 1

Class 11 – Thursday, February 20

Exam 1

Class 12 – Tuesday, February 25

Lecture: Volumes by [cross sections](#) and the [disk method](#) (6.1)

Class 13 – Thursday, February 27

Lecture: [Volumes by the washer method](#) (6.1)

Also posted: [Quiz 6 Information](#)

Class 14 – Tuesday, March 4

Lecture: [Volume by cylindrical shells](#) (6.2), [Arc Length](#) (6.3)

Class 15 – Thursday, March 6

Lecture: [Work](#) (6.5)

Also posted: [Quiz 7 Information](#)

Class 16 – Tuesday, March 11

Lecture: [Center of Mass](#) (6.6)

Class 17 – Thursday, March 13

Lecture: [The real number system](#) (Appendix 6), [Completeness](#)

Also posted: [Quiz 8 Information](#)

Class 18 – Tuesday, March 18

Lecture: [Sequences - part 1](#) (10.1)

Also posted: [Square-root of 2 is irrational](#)

Class 19 – Thursday, March 20

Lecture: [Sequences - part 2](#) (10.1)

Also posted: [Quiz 9 Information](#)

Class 20 – Tuesday, March 25

Lecture: [Sequences - part 3](#) (10.1), [Induction](#)

Class 21 – Thursday, March 27

Lecture: [Sequences - part 4](#) (10.1), [Limits of Sequences](#)

Also posted: [Exam 2 Information](#)

Class 22 – Tuesday, April 1

Lecture: Review for Exam 2

Class 23 – Thursday, April 3

Exam 2

Class 24 – Tuesday, April 8

Lecture: [Review of Fractions and Decimals](#), [Geometric Series](#) (10.2)

[Series 1](#) (10.2, 10.3)

Class 25 – Thursday, April 10

Lecture: [Series 2](#) (10.4)

Also posted: [Quiz 11 Information](#)

Class 26 – Tuesday, April 22

Lecture: [Root Test and Ratio Test](#) (10.5)

Class 27 – Thursday, April 22

Lecture: [Series 4](#) (10.6)

Also posted: [Quiz 12 Information](#), [Exam 3 Information](#), [Exam 3 Review](#)

Class 28 – Tuesday, April 29

Lecture: [Power Series](#) (10.7)

Class 29 – Thursday, May 1

Lecture: [Taylor Series and their Applications](#) (10.8, 10.9, 10.10)

Class 30 – Tuesday, May 6

Lecture: [Parametric Equations](#) (11.1, 11.2, 11.4), Final Review

Class 31 – Thursday, May 8

Final Exam