

Math 1A - Calculus I - Spring '17 - Tentative Course Outline:

The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

Week	Monday	Wednesday
Week 1 Feb 1	1.1 Four Ways to Represent a Function 1.2 Mathematical Models: A Catalog of Essential Functions 1.3 New Functions from Old Functions	1.4 Graphing Calculators and Computers 1.5 Exponential Functions 1.6 Inverse Functions and Logarithms
Week 2 Feb 8	§2.1 The Tangent and Velocity Problems 2.2 The Limit of a Function	2.3 Calculating Limits Using the Limit Laws 2.4 The Precise Definition of a Limit
Week 3 Feb 15	President's Day	2.5 Continuity
Week 4 Feb 22	2.7 Derivatives and Rates of Change 2.8 The Derivative as a Function	Chapter 2 Review
Week 5 Feb 29	Chapter 2 Review	Chapter 2 Test
Week 6 Mar 7	§3.1 Derivatives of Polynomials and Exponential Functions §3.2 The Product and Quotient Rules	3.3 Derivatives of Trigonometric Functions 3.4 The Chain Rule
Week 7 Mar 21	§3.5 Implicit Differentiation §3.6 Derivatives of Logarithmic Functions	3.7 Rates of Change in the Natural and Social Sciences 3.8 Exponential Growth and Decay
Week 8 Mar 28	§3.9 Related Rates §3.10 Linear Approximations and Differentials	3.11 Hyperbolic Functions
Week 9 Apr 4	Chapter 3 Review	Chapter 3 Test
Week 10 Apr 11	§4.1 Maximum and Minimum Values §4.2 The Mean Value Theorem	§4.3 How Derivatives Affect the Shape of a Graph §4.4 Indeterminate Forms and L'Hospital's Rule
Week 11 Apr 18	§4.5 Summary of Curve Sketching §4.6 Graphing with Calculus and Calculators	§4.8 Newton's Method §4.9 Antiderivatives
Week 12 Apr 25	Chapter 4 Review	Chapter 4 Test
Week 13 May 2	§5.1 Areas and Distances §5.2 The Definite Integral	§5.3 The Fundamental Theorem of Calculus
Week 14 May 9	Chapter 5 Review	Chapter 5 Test
Week 15 May 16	Review for final exam.	Review
Week 16 May 23	No class	Final Exam.