

AMAT112 Calculus I Lecture Schedule

WEEK	DATE	HW Due Dates and Resources
1	Mon 8/25 Tues 8/26 Thurs 8/28	• Introduction and Sec. 2.1 A Preview of Calculus • 1.1 Review of Functions • 1.2 Basic Classes of Functions • Quiz 1 Pre-Calculus Review Problems
2	Mon 9/1 Tues 9/2 Thurs 9/4	Classes suspended for Labor Day • 2.2 The Limit of a Function • 2.3 The Limit Laws • Quiz 2 Limits Practice Problems HW1 Secs. 1.1, 1.2 Due Friday
3	Mon 9/8 Tues 9/9 Thurs 9/11	• 4.6 Limits at Infinity and Asymptotes • Practice and Problem Session • 2.4 Continuity • Quiz 3 Limits at Infinity Practice Problems HW2 Secs. 2.2, 2.3, 4.6 Due Friday
4	Mon 9/15 Tues 9/16 Thurs 9/18	• 2.4 Continuity (Continued) • 3.1 Defining the Derivative • 3.2 The Derivative as a Function (Part 1) - up to Example 3.12 only • Quiz 4 Continuity Practice Problems The Derivate Practice Problems
5	Mon 9/22 Tues 9/23 Thurs 9/25	• Practice and Problem Session HW3 Secs. 2.4, 3.1, 3.2 Due Monday EXAM 1 in Class
6	Mon 9/29 Tues 9/30 Thurs 10/2	• 3.2 The Derivative as a Function (Part 2) • 3.3 Differentiation Rules • 3.3 Differentiation Rules (Continued) • 3.5 Derivatives of Trigonometric Functions • Quiz 5 HW4 Secs. 3.2, 3.3 Due Friday
7	Mon 10/6 Tues 10/7 Thurs 10/9	• 3.6 The Chain Rule • Practice and Problem Session • 3.8 Implicit Differentiation • Quiz 6 Chain, Product, and Quotient Rule Practice Problems Implicit Differentiation Practice Problems HW5 Secs. 3.5, 3.6 Due Friday
8	Mon 10/13 Tues 10/14 Thurs 10/16	Classes suspended for Fall Break Classes suspended for Fall Break • 3.7 Derivatives of Inverse Functions (via implicit differentiation) • Quiz 7 Inverse Functions Practice Problems Logarithmic Differentiation Practice Problems
9	Mon 10/20 Tues 10/21 Thurs 10/23	• 3.9 Derivatives of Exponential and Logarithmic Functions • Practice and Problem Session HW6 Secs. 3.7, 3.8, 3.9 Due Tuesday EXAM 2 in Class
10	Mon 10/27 Tues 10/28 Thurs 10/30	• 4.2 Linear Approximations and Differentials (up through 4.2.3) • 4.4 The Mean Value Theorem (Theorem 4.5 only and its applications) • 4.3 Maxima and Minima • Quiz 8 The Mean Value Theorem Practice Problems Maximum and Minimum Values Practice Problems
11	Mon 11/3 Tues 11/4 Thurs 11/6	• 4.3 Maxima and Minima (Continued) • Practice and Problem Session • 4.5 Derivatives and the Shape of a Graph • Quiz 9 Derivatives and Curve Sketching Practice Problems HW7 Secs. 4.2, 4.4 Due Friday
12	Mon 11/10 Tues 11/11 Thurs 11/13	• 4.6 *Analyze a function and its derivative to draw its graph • 4.8 L'Hopital's Rule (up through 4.42) • 4.8 L'Hopital's Rule (up through 4.42) (Continued) • Quiz 10 L'Hopitals Rule Practice Problems HW8 Sec. 4.3 Due Friday
13	Mon 11/17 Tues 11/18 Thurs 11/20	• 4.7 Applied Optimization Problems • 4.7 Applied Optimization Problems (Continued) • 4.10 Antiderivatives • Quiz 11 Optimization Practice Problems HW9 Secs. 4.5, 4.6, 4.8 Due Friday
14	Mon 11/24 Tues 11/25 Thurs 11/27	• Practice and Problem Session HW10 Secs. 4.7, 4.10 Due Monday EXAM 3 in Class
15	Mon 12/1 Tues 12/2 Thurs 12/4	Classes suspended for Thanksgiving Break • 5.1 Approximating Areas • 5.2 The Definite Integral • 5.3 The Fundamental Theorem of Calculus • Quiz 12 Area and the Definite Integral Practice Problems Evaluating Definite Integrals Practice Problems
16	Mon 12/8	• 5.3 The Fundamental Theorem of Calculus (Continued) The Fundamental Theorem of Calc Practice Problems HW11 Sec. 5.1, 5.2, 5.3 Due *Tuesday 12/9*
FINAL EXAM (Cumulative) date to be announce by the Registrar		