

AMAT112 Calculus I Lecture Schedule (Spring 2026)

WEEK	DATE	HW Due Dates and Resources
1	Th 1/22	<ul style="list-style-type: none"> Introduction and Sec. 2.1 A Preview of Calculus 1.1 Review of Functions 1.2 Basic Classes of Functions <p style="text-align: right;">Pre-Calculus Review Problems</p>
2	T/Th 1/27	<ul style="list-style-type: none"> 2.2 The Limit of a Function 2.3 The Limit Laws 4.6 Limits at Infinity and Asymptotes Quiz 1 (Secs. 1.1, 1.2) <p style="text-align: right;"> Limits Practice Problems Limits at Infinity Practice Problems HW1 Pre-Calculus Review Due Friday 1/30 </p>
3	T/Th 2/3	<ul style="list-style-type: none"> 2.4 Continuity 2.4 Continuity (Continued) 3.1 Defining the Derivative Quiz 2 (Secs. 2.2, 2.3, 4.6) <p style="text-align: right;"> Continuity Practice Problems HW2 Secs. 2.2, 2.3, 4.6 Due Friday 2/6 </p>
4	T/Th 2/10	<ul style="list-style-type: none"> 3.2 The Derivative as a Function 3.4 Derivatives as Rates of Change (Up to Checkpoint 3.21) Catch Up and Review <p style="text-align: right;"> The Derivative Practice Problems HW3 Sec. 2.4, 3.1, 3.2 Due Friday 2/13 </p>
EXAM 1 in Class Tuesday 2/17		
5	T/Th 2/17	<ul style="list-style-type: none"> 3.3 Differentiation Rules 3.3 Differentiation Rules (Continued)
6	T/Th 2/24	<ul style="list-style-type: none"> 3.5 Derivatives of Trigonometric Functions 3.6 The Chain Rule 3.6 The Chain Rule (Continued) Quiz 3 (Secs. 3.3, 3.5) <p style="text-align: right;"> Chain, Product, and Quotient Rule Practice Problems HW4 Secs. 3.3, 3.4 Due Friday 2/24 </p>
7	T/Th 3/3	<ul style="list-style-type: none"> 3.8 Implicit Differentiation 3.7 Derivatives of Inverse Functions (via implicit differentiation) 3.9 Derivatives of Exponential and Logarithmic Functions Quiz 4 (Secs. 3.6, 3.8) <p style="text-align: right;"> Implicit Differentiation Practice Problems Inverse Functions Practice Problems Logarithmic Differentiation Practice Problems HW5 Secs. 3.5, 3.6 Due Friday 3/6 </p>
8	T/Th 3/10	<ul style="list-style-type: none"> 4.2 Linear Approximations and Differentials (up through 4.2.3) Catch Up and Review <p style="text-align: right;"> Linear Approximation and Differentials Practice Problems HW6 Secs. 3.7, 3.8, 3.9 Due Wednesday 3/11 </p>
EXAM 2 in Class Thursday 3/12		
9	T/Th 3/17	<i>Classes Suspended for Spring Break</i>
10	T/Th 3/24	<ul style="list-style-type: none"> 4.4 The Mean Value Theorem (Theorem 4.5 only and its applications) 4.3 Maxima and Minima 4.3 Maxima and Minima (Continued) <p style="text-align: right;"> The Mean Value Theorem Practice Problems Maximum and Minimum Values Practice Problems </p>
11	T/Th 3/31	<ul style="list-style-type: none"> 4.5 Derivatives and the Shape of a Graph 4.5 Derivatives and the Shape of a Graph (Continued) 4.6 (Continued) Analyze a function and its derivative to draw its graph Quiz 5 (Secs. 4.2, 4.3, 4.4) <p style="text-align: right;"> Derivatives and Curve Sketching Practice Problems HW7 Secs. 4.2, 4.3, 4.4 Due Friday 4/3 </p>
12	T/Th 4/7	<ul style="list-style-type: none"> 4.8 L'Hopital's Rule (up through 4.42) 4.8 L'Hopital's Rule (up through 4.42) (Continued) 4.7 Applied Optimization Problems Quiz 6 (Secs. 4.5, 4.6) <p style="text-align: right;"> L'Hopital's Rule Practice Problems HW8 Secs. 4.5, 4.6 Due Friday 4/10 </p>
13	T/Th 4/14	<ul style="list-style-type: none"> 4.7 Applied Optimization Problems (Continued) 4.10 Antiderivatives Catch Up and Review <p style="text-align: right;"> Optimization Practice Problems Antiderivatives Practice Problems HW9 Secs. 4.7, 4.8, 4.10 Due Friday 4/17 </p>
EXAM 3 in Class Tuesday 4/21		
14	T/Th 4/21	<ul style="list-style-type: none"> 5.1 Approximating Areas 5.1 Approximating Areas (Continued) <p style="text-align: right;"> Area and the Definite Integral Practice Problems </p>
15	T/Th 4/28	<ul style="list-style-type: none"> 5.2 The Definite Integral 5.2 The Definite Integral (Continued) 5.3 The Fundamental Theorem of Calculus Quiz 7 (Secs. 5.1, 5.2) <p style="text-align: right;"> Evaluating Definite Integrals Practice Problems HW10 Sec. 5.1, 5.2 Due Friday 5/1 </p>
16	T 5/5	<ul style="list-style-type: none"> 5.3 The Fundamental Theorem of Calculus (Continued) <p style="text-align: right;"> The Fundamental Theorem of Calc Practice Problems HW11 (Optional) Sec. 5.3 Due Thursday 5/7 </p>
OPTIONAL DEPARTMENTAL FINAL EXAM (date to be announce by the Registrar)		