

# MA 16010 Applied Calculus I

## Calendar, Summer 2021

Exam 1: Lessons 1-7    Exam 2: Lessons 8-14    Exam 3: Lessons 15-23    Final: Lessons 1-29

Date	Lesson	Topics
6/14 Mon	1	Finding Limits Numerically; One-sided Limits; Finding limits Graphically
6/15 Tu	2	Finding Limits Analytically; Continuity
6/16 Wed	3	The Derivative
6/17 Th	4	Basic Rules of Differentiation; Derivatives of the Sine and Cosine Functions; Derivative of the Natural Exponential Function
6/18 Fri	5	Instantaneous Rates of Change
6/21 Mon	6	The Product Rule
6/22 Tu	7	The Quotient Rule; Derivatives of the Other Trigonometric Functions
6/23 Wed	8	The Chain Rule
6/24 Th		Review for Exam 1
6/25 Fri		<b>Exam 1</b>
6/28 Mon	9	The Chain Rule; Derivative of the Natural Logarithmic Function
6/29 Tu	10	Higher Order Derivatives; Implicit Differentiation
6/30 Wed	11	Implicit Differentiation; Related Rates
7/1 Th	12	Related Rates
7/2 Fri	13	Relative Extrema and Critical Numbers
7/5 Mon		Independence Holiday Observed (No Class)
7/6 Tu	14	Increasing and Decreasing Functions and the First Derivative Test
7/7 Wed	15	Concavity, Inflection Points and the Second Derivative Test
7/8 Thur		Review for Exam 2
7/9 Fri		<b>Exam 2</b>
7/12 Mon	16	Absolute Extrema on an Interval
7/13 Tu	17	Graphical Interpretation of Derivatives
7/14 Wed	18	Limits at Infinity
7/15 Th	19	A Summary of Curve Sketching
7/16 Fri	20	Optimization
7/19 Mon	21	Optimization
7/20 Tu	22	Antiderivatives and Indefinite Integration
7/21 Wed	23	Antiderivatives and Indefinite Integration
7/22 Th		Review for Exam 3
7/23 Fri		<b>Exam 3</b>
7/26 Mon	24	Area and Riemann Sums
7/27 Tu	25	Definite Integrals
7/28 Wed	26	The Fundamental Theorem of Calculus
7/29 Th	27	Numerical Integration
7/30 Fri	28	Exponential Growth
8/2 Mon	29	Exponential Decay
8/3 Tu		Review for Final Exam
8/4 Wed		<b>Final Exam</b>
8/5 Th		<b>Final Exam</b>
8/6 Fri		<b>Final Exam</b>