

MTH 141 Calculus 1 – Spring 2019

| Dates | Sections/Events/Exams | Problems |
|---------|---|--|
| Jan 21 | Jan 23 – 1 st day of class (1.2) Exponential Functions (1.3) New Functions From Old | (1.2) 1,2,5,7,9,10,15,16,19,29,38,40,41,43,49,55 (1.3) 1,2,3,8—12,14—17, 19,21,25,27,33,39, 41,49,51,55,56,58,59,73 |
| Jan 25 | (1.4) Logarithmic Functions | (1.4) 1—31 (odd), 32,35,37,39,42,43,45,49,61,62 |
| Jan 28 | (1.5) Trigonometric Functions (1.6) Powers, Polynomials, and Rational Functions | (1.5) 11,13,12,15,17,19,20,24,25,37,38,39,41,61,62,64,67,68,70,71 (1.6) 1—13 odd, 18—21, 27—32, 45,48,53,62—66,73 |
| Feb 1 | (1.7) Introduction to Limits and Continuity | (1.7) 1,3,4,5,6,7,8,11-17odd, 23,25—28,31,33,35,37,43,49,54,56,70, 71 |
| Feb 4 | (1.8) Extending the idea of a Limit (1.9) Further Limit Calculations using Algebra | (1.8) 1,3,5,9,11,13,19,25,31,32,33,35,39,41—51odd, 57,61 (1.9) 1—23odd, 27—31odd, 39,45 |
| Feb 8 | (2.1) How do we measure speed? | (2.1) 1,3,5,7,9,13,21,22,23,28 |
| Feb 11 | (2.2) The Derivative at a Point (2.3) The Derivative Function | (2.2) 1,3,5,9,11,12,13,19,21,23,28,29,32,33,34,37,51,52,56,58,60,61 (2.3) 1—13 odd, 22,23,25,29,33,44—47,57,58 |
| Feb 15 | (2.4) Interpretations of the Derivative | (2.4) 1,2,5,9-15odd,23,27,29,31,39,45,52 |
| Feb 18 | EXAM 1, 6:30pm-8.00pm Tues Feb 19, Chafee 271 (2.5) The Second Derivative (2.6) Differentiability | (2.5) 1,3,4,5,9,11-25odd,37,39,41 (2.6) 1-11,23-25,26-30 |
| Feb 22 | (3.1) Powers and Polynomials | (3.1) 1-43odd,69,71,77,83,95 |
| Feb 25 | (3.2) The Exponential Function (3.3) The Product and Quotient Rules (3.4) The Chain Rule | (3.2) 1-25odd, 47 (3.3) 1-39odd, 43,45,63,65 (3.4) 1-69odd,86,87 |
| Mar 1 | (3.5) The Trigonometric Functions | (3.5) 1-57odd,61,63 |
| Mar 4 | (3.6) The Chain Rule and Inverse Functions (3.7) Implicit Functions (3.8) Hyperbolic Functions | (3.6) 1-43odd,51,53,59,61,65,67 (3.7) 1-33odd, 39 (3.8) 1-13odd, 17,18,23,29,30 |
| Mar 8 | (3.9) Linear Approximation and the Derivative | (3.9) 1-13odd, 27,31,37 |
| Mar 11 | Spring Break – No Classes | |
| Mar 15 | | |
| Mar 18 | (4.1) Using First and Second Derivatives (4.2) Optimization | (4.1) 1-15odd,16-19,23,27,32,34,35,41,43,53,55 (4.2) 1,5-9,11-19odd,23,24,31,33,3 |
| Mar 22 | | |
| Mar 25 | EXAM 2, 6:30pm-8.00pm Tues Mar 26, Chafee 271 (4.3) Optimization and Modeling | (4.3) 1,5,7,8,9,11-19odd,23,24,31,33,36,47 |
| Mar 29 | | |
| April 1 | (4.6) Rates and Related Rates (4.7) L'Hopital's Rule, Growth, and Dominance | (4.6) 1-9odd,10,15-25odd,30,31,33,41,42,49,51 (4.7) 1-12,13-37odd,43,58-64,71-74 |
| Apr 5 | | |
| Apr 8 | (5.1) How Do We Measure Distance Traveled? (5.2) The Definite Integral | (5.1) 1-9odd,10,11,25,27,30,31,33 (5.2) 1-15odd,23,24,35,37,47-53odd |
| Apr 12 | (5.3) The Fundamental Theorem and Interpretations | (5.3) 1,3,4,5,7,15-27odd,33,35,53,54,55 |
| Apr 15 | (5.4) Theorems About Definite Integrals (6.2) Constructing Antiderivatives Analytically | (5.4) 1,3,4,5-21odd,22,25,29,31-37odd,41,53,55 (6.2) 3-33odd,67-83odd,87,89,91 |
| Apr 19 | | |
| Apr 22 | EXAM 3, 6:30pm-8.00pm Tues Apr 23, Chafee 271 (6.1) Antiderivatives Graphically and Numerically (6.4) The Second Fundamental Theorem of Calculus | (6.1) 3,7,9,13,25odd (6.4) 5-17odd,23,27 |
| Apr 26 | (3.10) Theorems about differentiable functions | TBA |
| Apr 29 | Review | |
| Apr 30 | Last Day of Classes – | |