

# MTH 141 Calculus 1 – Fall 2017

## MTH 141 Fall 2017 - Calendar Version 09/05/2017

The following calendar gives a timetable for the course. Your class may be slightly behind or ahead at any given time. Some of the problems may be done in class, others as homework. Your instructor will be more specific. You should work out all the problems given below. NOTE: notation like "3-9" means that all problems from 3 to 9 are to be done. Textbook: Calculus: Single Variable, by Hughes-Hallet et al, **7th ed.**, Wiley.

Week	Dates	Sections/Events/Exams	Problems
1	Sept. 6   Sept. 8	<b>First Day of Class Wed. Sept. 6</b> (1.1) Functions and Change (1.2) Exponential Functions	(1.1) 1,2,5,7,9,13,16,18,33,35—38,43,53,63,67,71 (1.2) 1,2,5,7,9,10,15,16,19,29,38,40,41,43,49,55
2	Sept. 11   Sept. 15	(1.3) New Functions From Old (1.4) Logarithmic Functions (1.5) Trigonometric Functions (1.6) Powers, Polynomials, and Rational Functions	(1.3) 1,2,3,8—12,14—17, 19,21,25,27,33,39, 41,49,51,55,56,58,59,73 (1.4) 1—31 (odd), 32,35,37,39,42,43,45,49,61,62 (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
3	Sept. 18   Sept. 22	(1.7) Introduction to Limits and Continuity (1.8) Extending the idea of a Limit (1.9) Further Limit Calculations using Algebra	(1.7) 1,3,4,5,6,7,8,11-17odd, 23,25—28,31,33,35,37,43,49,54,56,70, 71 (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
4	Sept. 25   Sept. 29	(2.1) How do we measure speed? (2.2) The Derivative at a Point (2.3) The Derivative Function	(2.1) 1,3,5,7,9,13,21,22,23,28 (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
5	Oct. 2   Oct. 6	<b>EXAM 1 6:30pm-8.00pm Mon. Oct 2, Chafee 271</b> (2.4) Interpretations of the Derivative (2.5) The Second Derivative (2.6) Differentiability	(2.4) 1,2,5,9-15odd,23,27,29,31,39,45,52 (2.5) 1,3,4,5,9,11-25odd,37,39,41 (2.6) 1-11,23-25,26-30
6	Oct. 9   Oct. 13	(3.1) Powers and Polynomials ( <i>Oct 9 no class</i> ) (3.2) The Exponential Function (3.3) The Product and Quotient Rules	(3.1) 1-43odd,69,71,77,83,95 (3.2) 1-25odd, 47 (3.3) 1-39odd, 43,45,63,65
7	Oct. 16   Oct. 20	(3.4) The Chain Rule (3.5) The Trigonometric Functions (3.6) The Chain Rule and Inverse Functions	(3.4) 1-69odd,86,87 (3.5) 1-57odd,61,63 (3.6) 1-43odd,51,53,59,61,65,67
8	Oct. 23   Oct. 27	(3.7) Implicit Functions (3.8) Hyperbolic Functions (3.9) Linear Approximation and the Derivative	(3.7) 1-33odd, 39 (3.8) 1-13odd, 17,18,23,29,30 (3.9) 1-13odd, 27,31,37
9	Oct. 30   Nov 3	<b>EXAM 2 6:30pm-8.00pm Mon. Oct 30, Chafee 271</b> (3.10) Theorems about Differentiable Functions (4.1) Using First and Second Derivatives (4.2) Optimization	(3.10) TBA (4.1) 1-15odd,16-19,23,27,32,34,35,41,43,53,55 (4.2) 1,5-9,11-19odd,23,24,31,33,36
10	Nov. 6   Nov. 10	(4.3) Optimization and Modeling (4.6) Rates and Related Rates	(4.3) 1,5,7,8,9,11-19odd,23,24,31,33,36,47 (4.6) 1-9odd,10,15-25odd,30,31,33,41,42,49,51
11	Nov. 13   Nov. 17	<i>Nov 13 No Class; Wed. Nov 15 = Monday Makeup Day</i> (4.7) L'Hopital's Rule, Growth, and Dominance (5.1) How Do We Measure Distance Traveled?	(4.7) 1-12,13-37odd,43,58-64,71-74 (5.1) 1-9odd,10,11,25,27,30,31,33
12	Nov. 20   Nov. 24	(5.2) The Definite Integral (5.3) The Fundamental Theorem and Interpretations <b>(No classes Thanksgiving Break Nov. 23 – Nov. 26)</b>	(5.2) 1-15odd,23,24,35,37,47-53odd (5.3) 1,3,4,5,7,15-27odd,33,35,53,54,55
13	Nov. 27   Dec. 1	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
14	Dec. 4   Dec. 8	<b>EXAM 3 6:30pm-8.00pm Mon. Dec. 4, Chafee 271</b> (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
15	Dec 11	Last Day of Classes –	