

# MTH 141 Introductory Calculus – Fall 2015

## MTH 141 Fall 2015 - Calendar

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, **6th ed.**, Wiley.

Week	Dates	Sections/Events/Exams	Problems (*) = requires technology
1	Sept. 9   Sept. 11	<b>First Day of Class Wed. Sept. 9</b> (1.1) Functions and Change (1.2) Exponential Functions	(1.1) 1,6,9,12,16*,17,21,26,37,40,43,44*,51,55 (1.2) 5-14,22*,23,30*,35*,37,38
2	Sept. 14   Sept. 18	(1.3) New Functions From Old (1.4) Logarithmic Functions (1.5) Trigonometric Functions (1.6) Powers, Polynomials, and Rational Functions	(1.3) 1,2,3,8,11,13,15,23,24,28-31,36,37,,55 (1.4) 3,7-13,19,20,25,29,30,32*,33*,40*,50* (1.5) 14-19,22-23,27,30,33,39,41,43,44,51 (1.6) 3-10,19-22,36-38,45*,46*
3	Sept. 21   Sept. 25	(1.7) Introduction to Continuity (1.8) Limits (2.1) How do we measure speed?	(1.7) 2-7,19-21,24-25,27,32,37 (1.8) 1-3,7-9,12-15,19*,23*,25*,29,31,54-62,64-67 (2.1) 1,3-5,8,9*,14-17,21,23,24*,25-28
4	Sept. 28   Oct. 2	(2.2) The Derivative at a Point (2.3) The Derivative Function (2.4) Interpretations of the Derivative	(2.2) 1,4,10-13,17*,26*,35-38,41-50 (2.3) 1,3,7,9,11,13,15,16,19,21,28,29,31,33,43 (2.4) 1-4,6,9,11,12,18,21
5	Oct. 5   Oct. 9	<b>EXAM 1 6:30pm-8.00pm Tues. Oct 6, Chafee 271</b> (2.5) The Second Derivative (2.6) Differentiability	(2.5) 2-4,8-13,16,18-23,28-31 (2.6) 1-4,6*,9,12,16
6	Oct. 12   Oct. 16	(3.1) Powers and Polynomials (3.2) The Exponential Function (3.3) The Product and Quotient Rules	(3.1) 6-47odd,50-55-59,60,63,70,71 (3.2) 1-25odd,40,41 (3.3) 3-29odd,31,32,39-42,45,52,53
7	Oct. 19   Oct. 23	(3.4) The Chain Rule (3.5) The Trigonometric Functions (3.6) The Chain Rule and Inverse Functions	(3.4) 1-55 odd, 57,58,61,62,67,76ab,77 (3.5) 10,11,18,21,27-30,38,42,62 (3.6) 1-8,21-28,43,57-59,63,65
8	Oct. 26   Oct. 24	(3.7) Implicit Functions (3.8) Hyperbolic Functions (3.9) Linear Approximation and the Derivative	(3.7) 1-20odd,26-30,31-33,37 (3.8) 1-11,30 (3.9) 1-7,10,11*,13*,14,20-22,30,31,36,38,39
9	Nov. 2   Nov 6	<b>EXAM 2 6:30pm-8.00pm Tue. Nov 3, Chafee 271</b> (3.10) Theorems about Differentiable Functions (4.1) Using First and Second Derivatives	(3.10) TBA (4.1) 1,4-14,16-19,28-29,33,38-40
10	Nov. 9   Nov. 13	Wed. Nov. 11 Classes do not meet -Veteran's Day (4.2) Optimization (4.3) Optimization and Modeling	(4.2) 1-25odd,27,28,29*,36 (4.3) 1-9 odd, 17, 20-21, 28-30
11	Nov. 16   Nov. 20	(4.6) Rates and Related Rates (4.7) L'Hopital's Rule, Growth, and Dominance (5.1) How Do We Measure Distance Traveled?	(4.6) 1,2,5,7,11,12,16-19,25-29,33,44 (4.7) 1-8, 16-18, 25-41 odd, 48,49 (5.1) 1-4, 6-12,13,15,17-18,24-25,27
12	Nov. 23   Nov. 27	(5.2) The Definite Integral (5.3) The Fundamental Theorem and Interpretations <b>(No classes Thanksgiving Break Nov. 26 – Nov. 29)</b>	(5.2) 3-4,11-17,19, 22*-28*, 31,32 (5.3) 3-7,9-12,21,31,42 (5.3) 3-7,9-12,21,31,42
13	Nov. 30   Dec. 4	<b>EXAM 3 6:30pm-8.00pm Tue. Dec. 1, Chafee 271</b> (5.4) Theorems About Definite Integrals (6.1) Antiderivatives Graphically and Numerically	(5.4) 2-12,13*-17*,21,24,27-30 (6.1) 2-9,13-14,17,19,23,25
14	Dec. 7   Dec. 11	(6.2) Constructing Antiderivatives Analytically (6.4) The Second Fundamental Theorem of Calculus Friday Dec. 11 Last Day of Classes	(6.2) 1-60,65-67,70-71 (6.4) 4-5,11-14,35-38