MTH 141 Introductory Calculus – Spring 2016

MTH 141 Spring 2016 - 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. Notation like "3-9" means that all problems from 3 to 9 are to be done. Starred problems require technology. Textbook: Calculus: Single Variable, by Hughes-Hallet et al, **6th ed.**, Wiley.

Week	Dates	Sections/Events/Exams	**Problems** (*) = requires technology
1	Jan 26	***First Day of Class Tuesday. Jan 26***	
	|	(1.1) Functions and Change	(1.1) 1,6,9,12,16*,17,21,26,37,40,43,44*,51,55
	Jan 29	(1.2) Exponential Functions	(1.2) 5-14,22*,23,30*,35*,37,38
		(1.3) New Functions From Old	(1.3) 1,2,3,8,11,13,15,23,24,28-31,36,37,,55
2	Feb 1	(1.4) Logarithmic Functions	(1.4) 3,7-13,19,20,25,29,30,32*,33*,40*,50*
	|	(1.5) Trigonometric Functions	(1.5) 14-19,22-23,27,30,33,39,41,43,44,51
	Feb 5	(1.6) Powers, Polynomials, and Rational Functions	(1.6) 3-10,19-22,36-38,45*,46*
3	Feb 8	(1.7) Introduction to Continuity	(1.7) 2-7,19-21,24-25,27,32,37
	|	(1.8) Limits	(1.8) 1-3,7-9,12-15,19*,23*,25*,29,31,54-62,64-67
	Feb 12	(2.1) How do we measure speed?	(2.1) 1,3-5,8,9*,14-17,21,23,24*,25-28
4	Feb 15	***Exam 1 Tuesday Feb 16, 6:30-8:00pm***	
	|	(2.2) The Derivative at a Point	(2.2) 1,4,10-13,17*,26*,35-38,41-50
	Feb 19	(2.3) The Derivative Function	(2.3) 1,3,7,9,11,13,15,16,19,21,28,29,31,33,43
5	Feb 22	(2.4) Interpretations of the Derivative	(2.4) 1-4,6,9,11,12,18,21
	|	(2.5) The Second Derivative	(2.5) 2-4,8-13,16,18-23,28-31
	Feb 26	(2.6) Differentiability	(2.6) 1-4,6*,9,12,16
6	Feb 29	(3.1) Powers and Polynomials	(3.1) 6-47odd,50-55-59,60,63,70,71
	|	(3.2) The Exponential Function	(3.2) 1-25odd,40,41
	Mar 4	(3.3) The Product and Quotient Rules	(3.3) 3-29odd,31,32,39-42,45,52,53
7	Mar 7	(3.4) The Chain Rule	(3.4) 1-55 odd, 57,58,61,62,67,76ab,77
	|	(3.5) The Trigonometric Functions	(3.5) 10,11,18,21,27-30,38,42,62
	Mar 11	(3.6) The Chain Rule and Inverse Functions	(3.6) 1-8,21-28,43,57-59,63,65
8	Mar 14	***Exam 2 Tuesday Mar 15, 6:30-8:00p.m.***	
	|	(3.7) Implicit Functions	(3.7) 1-20odd,26-30,31-33,37
	Mar 18	(3.8) Hyperbolic Functions	(3.8) 1-11,30
	Mar 21		
	|	***Spring Break – No Classes***	
	Mar 25		
9	Mar 28	(3.9) Linear Approximation and the Derivative	(3.9) 1-7,10,11*,13*,14,20-22,30,31,36,38,39
	|	(3.10) Theorems about Differentiable Functions	(3.10) 10,11,30-37
	Apr 1	(4.1) Using First and Second Derivatives	(4.1) 1,4-14,16-19,28-29,33,38-40
10	Apr 4	(4.2) Optimization	(4.2) 1-25odd,27,28,29*,36
	|	(4.3) Optimization and Modeling	(4.3) 1-9 odd, 17, 20-21, 28-30
	Apr 8		
11	Apr 11	(4.6) Rates and Related Rates	(4.6) 1,2,5,7,11,12,16-19,25-29,33,44
	|	(4.7) L'Hopital's Rule, Growth, and Dominance	(4.7) 1-8, 16-18, 25-41 odd, 48,49
	Apr 15	(5.1) How Do We Measure Distance Traveled?	(5.1) 1-4, 6-12,13,15,17-18,24-25,27
12	Apr 18	***Exam 3 Tuesday April 19, 6:30-8:00p.m.***	
	|	(5.2) The Definite Integral	(5.2) 3-4,11-17,19, 22*-28*, 31,32
	Apr 22	(5.3) The Fundamental Theorem and Interpretations	(5.3) 3-7,9-12,21,31,42
13	Apr 25	(5.4) Theorems About Definite Integrals	(5.4) 2-12,13*-17*,21,24,27-30
	|	(6.1) Antiderivatives Graphically and Numerically	6.1) 2-9,13-14,17,19,23,25
	Apr 29	(6.2) Constructing Antiderivatives Analytically	(6.2) 1-60,65-67,70-71
14	May 2	(6.4) The Second Fundamental Theorem of Calculus	(6.4) 4-5,11-14,35-38
	|	Monday May 2nd Last day of Class	