

Spring 2012 Math 25L Syllabus

Textbook: Calculus (5th ed), by Hughes-Hallett, et al.

Day	Date	Section	Topic	Homework
1-2	11-Jan		Course Expectations, Reviewing Algebra Expectations	Online Algebra Assessment
Lab:	12-Jan		Cancer Mortality: Fitting a Line to Data	Online Writing Assessment
1-3	13-Jan		Precalc Assessment, Writing in Math	
2-1	16-Jan	<i>MLK Day</i>		
2-2	18-Jan		Introduction to Modeling	1.1/5,7,10-13; Cspk p.31-32 (Intro modeling)
Lab:	19-Jan		Linear Modeling	
2-3	20-Jan	1.1	Functions	1.1/1-3,20-23,36,37; Cspk p.33/1-6.
3-1	23-Jan	1.1	Linear Functions	1.1/15-19,30,32,35,42,46; Cspk p.37/1,2,4-6.
3-2	25-Jan	1.6	Power Functions & Polynomials	1.6/6,7,8,12,14-16,19-21,24; Cspk p.41/1,2
Lab:	26-Jan		Exploring Limits	
3-3	27-Jan	1.6	Rational Functions	1.6/3,13,a,b,e,25,26; Cspk p.42/3-5.
4-1	30-Jan	1.3	New Functions From Old	1.3/4-7,12,16,28-32,34;Cspk p.45/1-6.
4-2	31-Jan	2.1	Rate of Change	2.1/1,4,5,8,11,13,15-23.
Lab:	1-Feb		Strategies for Buying Stock	
4-3	2-Feb	2.2	Derivative at a Point	2.2/1,8-12,14,16,25,38,40,43,44,47; begin 5-2 review.
5-1	6-Feb		Limits	1.7/1-6,15,20-22,28; 1.8/1,11-13,25,26,46,48,51; finish 5-2 review
5-2	8-Feb	1.7,1.8	Review	p.61/18,30,33,36,37,39,40,46,48,54,56,58,66,71; p. 109/5,7,9,15,19,20,22,28-30,33,34.
Lab:	9-Feb		Test 1	
5-3	10-Feb	2.3	The Derivative Function	2.3/3,5,7,12,13,15,25,26,29,33,36,37,40,41,46
6-1	13-Feb	2.4	Interpretations of the Derivative	2.4/1-3,6-8,10,11,16,20,23,25,28.
6-2	15-Feb	2.5	The Second Derivative	2.5/1-5,7,9,12,15,22,26,28-30.
Lab:	16-Feb	3.1	Sum, Difference & Power Rules	3.1/1,2,7,9,10,13,14,19,23,25,33,55-57,59,61,65,67.
6-3	17-Feb	2.6	Continuity & Differentiability	2.6/1-5,8-10.
7-1	20-Feb	3.2	Product and Quotient Rules	3.3/1,8,15,16,19,20,23,24,30-32,34,37,44,45,48,51,52,56.
7-2	22-Feb	1.3	Inverse Functions	1.3/20-24,40-44,62,64; Cspk p.47/1-3.
Lab:	23-Feb		Compound Interest	
7-3	24-Feb	1.2	Exponential Functions	1.2/5-8,15,17,19,22-25,29,30,32,35.
8-1	27-Feb	1.4	Logarithms	1.4/1-10,14-21,24,30,31,39,40,41,47,50,52; Cspk p.49/1-5.
8-2	29-Feb	3.2	Differentiating Exponential Functions	3.2/1,6,14,16,21,23,25,39,40,44-46;3.3/6,12,27,50,53.
Lab:	1-Mar		Log Plots	
8-3	2-Mar	1.3	Composition	1.3/13,18,45-48,60; Cspk p.51/1-5.

9-1	5-Mar	<i>Spring Break</i>		
9-2	7-Mar	<i>Spring Break</i>		
Lab:	8-Mar	<i>Spring Break</i>		
9-3	9-Mar	<i>Spring Break</i>		
10-1	12-Mar	3.4	Chain Rule	3.4/4,9,20,23,35,43,47,49,51,52,55,58,59,69-73,85; Cspk p.53/1-6; begin 11-2 review.
10-2	13-Mar	3.7	Implicit Differentiation I	3.7/1,2,6,7,8,10,11,16-19,23,24,27,30-32,35
Lab:	14-Mar		Implicit Differentiation II	
10-3	15-Mar	3.6	Differentiating Logarithmic Functions	3.6/3-5,8,9,22,27,28,30,38,40,41,43,44; finish 11-2 review.
11-1	19-Mar	3.9	Linear Approximations	3.9/2-7,14,15,21,23,24.
11-2	21-Mar		Review	p.60/59-61,63,70; p 109/ 11,27,37,38,41,43; p.168/3,5,12,18,22,37,38,45,84-86,93,94,96b,d,f,97b,d,f; Cspk p.55/1-21,a-d; Cspk p. 57/1-4
Lab:	22-Mar		Test 2	
11-3	23-Mar	4.1	Using 1st & 2nd Derivatives	4.1/9,11-13,18-21,32
12-1	26-Mar	4.1	Using 1st & 2nd Derivatives	4.1/7,22-24,28-30,41,43,46,47,51,52.
12-2	28-Mar		Catch Up Day	
Lab:	29-Mar		Derivatives and Roots	
12-3	30-Mar	4.2	Optimization	4.2/13,14,17,24,25,27,35,38.
13-1	2-Apr	4.4	Optimization	4.4/4,33-36,38,42,43,46.
13-2	4-Apr	4.7	L' Hopital's Rule	4.7/1-3,9-13,15,16; Cspk p.59/a-j
Lab:	5-Apr		Relative Rates of Growth, Differentiation Practice	
13-3	6-Apr	4.4	Optimization	p.249/65a;Cspk p.61/1,3,6,9;Cspk p.63/1,3,5.
14-1	9-Apr		Review	p.168/75,77,79,100,102,109,112;p.246/2,3,6,9,16-18,28,31,35,48,53,66.
14-2	11-Apr		Test 3	
Lab:	12-Apr		Probability I	Cspk p.69/a-h
14-3	13-Apr		Probability II	Cspk p.75/a-j
15-1	16-Apr		Probability III	Cspk p.81/a-n
15-2	18-Apr	4.6	Related Rates	4.6/16,21,31-34,38-40.
Lab:	19-Apr		Related Rates	
15-3	20-Apr		Review of Probability and Related Rates	
16-1	23-Apr		Quiz – Related Rates/Probability	
16-2	25-Apr		TCE	