

Fall 2017 Math 111L Syllabus

Textbook: Calculus (6th ed.), by Hughes-Hallet, et al.

Day	Date	Section	Topic	Homework
1-1	08/28/17	1.3, 1.4	Inverses/Logarithms	1.3/12,15,18,20,26,27,30,31,42,47,57-61,66,67; p68/13,27,19 1.4/1,2,4,7,9,10,20,26,30,39,52,54; p71/62,64.
Lab:	08/29/17	Log Plots		individual spreadsheet assignment
1.2	08/30/17	2.1	Measuring Speed	2.1/1,10-13,18,20,21; p116/8.
1.3	09/01/17	2.2	Derivative at a Point	2.2/4,8,9,11,12,24,41,42,45,47,48.
2-1	09/04/17	1.7,1.8	Limits	1.7/20,32; 1.8/1,3,29,31,52a-c,53a-c;54,57,58,60-65; p70/48; 2.1/15,16,;
Lab:	09/05/17	Strategies for Buying Stock		individual spreadsheet assignment
2-2	09/06/17	2.3	The Derivative Function	2.3/3,4,6,9,12,19,20,26,28,34-37,40.
2-3	09/08/17	3.9	Linear Approximations	3.9/3,4,8,15,26,39.
3-1	09/11/17	2.4	Interpretations of the Der.	2.4/3-6,10,22,24,26-28; p119/55.
Lab:	09/12/17	Introduction to Euler's Method		
3-2	09/13/17	2.5	Second Derivative	2.5/2-4,8-13,15,24,25,27,30.
3-3	09/15/17	2.6	Differentiability	2.6/1,2,5-9,11,12,14; 1.8/81.
4-1	09/18/17	3.1	Power Functions & Polynomials	3.1/1,2,6,9-13,21,25,26,33,38,48,49,57,58,61,63,68,70,74,75,79; p180/6
Lab:	09/19/17	First & Second Derivatives and Roots		
4-2	09/20/17	3.2	The Exponential Function	3.2/1,6,15,18,21,40,44-47; p181/61.
4-3	09/22/17	3.3	Product and Quotient Rules	3.3/1,2,4,5,10,15,16,19,28,40-44,52,56,58,60,61,64; p180/4; begin day 5-1 review problems.
5-1	09/25/17	<i>Review</i>		1.4/34,49; 1.7/21; p68/20,32,39,45,58; p180/83,105; 2.4/17; p116/14,15,22,24,31,32,34,47,48,49,52,54,62,65.
Lab:	09/26/17	Test #1		
5-2	09/27/17	3.4	Chain Rule	3.4/1,2,13,21,22,27,40,53,61,63,65,68,70,74,75,77,84; p180/2,50.
5-3	09/29/17	1.5	Trig. Review	1.5/14,15,23,27-29,32,33,41,43,55; p68/24,66.
6-1	10/02/17	3.5	Der. Of Trig. Functions	3.5/3,4,12,14,17,19,22,24,29,31,36,38,47,50,52,56,63.
Lab:	10/03/17	Newton's Law of Motion: An Introduction to Differential Equations		
6-2	10/04/17	<i>Course P</i>	Differential Equations	Course Pack p68-71/1,2,3,4,5,7,8,9,12,13
6-3	10/06/17	<i>Course P</i>	Differential Equations	Course Pack p68-71/14,16,17,18,19,20,22,23,24,25
7-1	10/09/17	Fall Break		Differentiation Practice – Course Pack p68/1-28
Lab:	10/10/17	Lab does not meet this week		
7-2	10/11/17	3.6	Chain Rule & Inverse Functions	3.6/1,2,11,12,14,18,22,25,28,30,44,45,49,50,51,52,63,64,73; p180/28
7-3	10/13/17	3.7	Implicit Functions	3.7/1,3,14,15,25,26,27,32,34,40.

Day	Section	Topic	Homework	
8-1	10/16/17	4.6	Related Rates	4.6/6,7,11,26,28,33,34,38,42,44,45; p260/90.
Lab:	10/17/17		Chemical Rate Equations	
8-2	10/18/17		Completion of Chem Rates Lab	Course Pack p68-71/26,28,29
8-3	10/20/17	4.1	Using f' and f''	4.1/9,13,14,24,26,21,22,27,29,34,39,40,42; p260/79.
9-1	10/23/17	4.2	Optimization	4.2/4,7,11,12,15,16,29,26,31,40; 4.3/53.
Lab:	10/24/17		Gateway test	
9-2	10/25/17	4.4,4.5	More Optimization; Econ.	4.3/5,6,17,33,42,44; 4.5/9,2,14,22; p260/67,71,73,74.
9-3	10/27/17	4.7	L'Hôpital's Rule	4.7/17,18,19,14,15,16,31,32,34,45,48,49; begin day 10-1 review problems.
10-1	10/30/17	<i>Review</i>		p180/77,93,94,101,110,112,120a; p260/3,6,8,21,27,40,48,51,70,81,84,93,4/88; Course Pack p68-70/6,10,11,15,21,27
Lab:	10/31/17		Test #2	
10-2	11/01/17	5.1	Distance from Velocity	5.1/4,5,8,15,18,25,26; 5.3/42; p309/2,25.
10-3	11/03/17	5.2	The Definite Integral	5.2/3,11,14,18,19,29-31,35,43.
11-1	11/06/17	5.3	FTC	5.3/1-3,8,20,21,30,33,35; 5.4/37; p309/23,26,36; p345/1,2.
Lab:	11/07/17		Riemann Sums	
11-2	11/08/17	5.3	Lab review; averaging	5.3/34; 5.4/7,9,11,12,25,33,38,39-42,45,57; p309/27,28.
11-3	11/10/17	5.4	Properties of Integrals	5.4/1-6,46; p309/32,33,34,35,46,47.
12-1	11/13/17	6.2,6.3	Antiderivatives, Diff. Eqns.	6.2/2,4,7,11-13,15,18,22,23,25,28,30,36,53,54,82; 6.3/15,19,20,22,26,28,29; p345/16,18,24,28,56,67,78.
Lab:	11/14/17		Varying Density	
12-2	11/15/17	6.4	FTC II	6.4/2,4-7,9-12,15,22,23,25,26,35; p345/73,74.
12-3	11/17/17	11.2	Slopefields	11.2/4,9,13,15,17; 11.5/3,9; p655/2.
13-1	11/20/17	11.4	Separation of Variables	11.4/3,9,12,13,17,18,22,23,25,26,39; 11.5/7,21,26,28.
Lab:	11/21/17		Gateway Make-up	
13-2	11/22/17		Thanksgiving Recess	
13-3	11/24/17		Thanksgiving Recess	
14-1	11/27/17	11.7	Logistic Models	11.7/8,35; p655/44; begin day 15-1 review problems.
Lab:	11/28/17		Net Worth of a Company	
14-2	11/29/17	11.3	Euler's Method	11.3/6a,b,8a,10a,17.
14-3	12/01/17	11.6	Applications and Modeling	11.6/15-18,22,23,25.
15-1	12/04/17	<i>Review</i>		5.1/24; 5.2/17; 5.3/25,32,38; 5.4/24,27,34 p290/6,11-13,17,18,19,49,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77; p325/32,79; 11.2/18; p628/5,10,12,20,27,31.
Lab:	12/05/17		Test #3	
15-2	12/06/17		Teacher's option	
15-3	12/08/17		<i>TCE Day</i>	