

## Spring 2002 Math 26L Syllabus

Textbook: Calculus (3rd ed), by Hughes-Hallett, et al.

Day	Section	Topic	Homework
1-2	Cspk.	Review of Basic Trigonometry.	Cspk. 63/1-13.
Lab: Trigonometry Basics			
1-3	3.5	Derivatives of Sine and Cosine	3.5/1,3,4,9-11,18,21,25,32,36,38,42,43,49,50,53.
2-1	3.5	Derivative of Tangent	1.5/1-9; 3.5/15,16,19,26,27,29.
2-2	Cspk.	Inverse Trigonometric Functions	Cspk. 67&68; Cspk. 69/1-5.
Lab: Modeling With Trigonometric Functions			
2-3	3.6	Diff. Inverse Trig. Functions.	3.6/17-20,23,33,35,37,43,53-55.
3-1	<i>Martin Luther King, Jr., holiday</i>		
3-2	<i>Teacher's Choice</i>		
Lab: Newton's Law of Motion			
3-3	6.3,6.5	Position, Velocity and Accel	6.3/14,17,18,20,23; 6.5/1-6,9.
4-1	11.1	What is a Differential Equation?	11.1/1,3,4,6,8-10,13-15. Finish day 4-2 review prob.
4-2	<i>Review</i>		p48/4,5,11,20,21,35,36,39;p100/19;p159/6-9,11,14,16-19,22,25,35-37,45,54,57,62(e),65,73,75,79.
Lab: <b>Test #1</b>			
4-3	11.2	Slopefields	11.2/1-10.
5-1	11.3	Euler's Method	11.3/1,2,4,6,9
5-2	Cspk.	Differential Equations I	Cspk. 89/1-9.
Lab: Gateway Test			
5-3	11.4	Separation of Variables	11.4/1,4,6,15,16,19,21,22,24,225,27,32,45-47.
6-1	11.4	Separation of Variables	11.4/7,8,13,14,17-20,23,28-31,34,35.
6-2	Cspk.	Differential Equations II	Cspk 99/2-11.
Lab: Newton's Law of Cooling			
6-3	11.5	Growth and Decay	11.5/1,2,4-6,10,13,17-19,22,23.
7-1	11.6	Applications and Modeling	11.6/1,3,6,7,12,14,17,18,20;Cspk. 73/1,2.
7-2	11.7	Applications and Modeling	11.7/1,2,4-10;Cspk.75/3,4;Start day 8-2 review prob
Lab: Logistic Growth			
7-3	Cspk.	Sums and Sigma Notation	Cspk. 81/1,2. Finish day 8-2 review prob.
8-1	5.1	Distance From Velocity	5.1/2-4,8,9,11-14; day 8-2 review.
8-2		Review	Cspk. 77/1-4;p284/54-60;p552/1-4,8,9,11,13,16,18,19,21,30,31,35-37,42.
Lab: <b>Test #2</b>			
8-3	5.2	Definite Integral	5.2/1,2,6,7,11-14,23,24,28,30,32-34.

9-1	Cspk.	Riemann Sums	Cspk. 131/ exercises in parts I-V.
9-2	5.3	Interpreting the Definite Integral.	5.3/1-9,12,18,20-22,26,30,31.
Lab: Average Value of a Function			
9-3		<i>Teacher's Choice(review)</i>	p252/1-7,15-18,21-23,25,26,28,31,34,36;
10 <i>Spring Break</i>			
11-1	5.4	FTC I.	5.4/1,2,4,5,12,14,16-21.
11-2	6.2	Constructing Antiderivatives.	6.2/1,6,7,9-11,14,15,20,28,31,41,46,56,60,63, 73,74,76,81-84.
Lab: Arc Length			
11-3	6.4	FTC II.	6.4/1-4,6,7,11,14-18,21,22.
12-1	7.1	Integration by Substitution.	7.1/1,4,8,11,13,14,22,23,26,29,34,35,47,55,59,62, 67,69,73,74.
12-2	7.2	Integration By Parts.	7.2/1-6,10,12,15,19,22,23,27,28,31,32,37,45,52.
Lab: Quantities of Varying Density			
12-3	Cspk.	Antidifferentiation Practice	Cspk. 83/1-27;Cspk. 85/1-7.
13-1	7.7	Improper Integrals	7.7/1,2,4,8-11,17,22,24,36,39.
13-2		Review	p284/1-3,5-7,10-12,15,17,31,33,34,36-38,41,42, 45-47,49,52,53,61;p.338/2,6,8,12-15,17,19,20,22, 25,27,30,34,37,45,50,65,74,100-102,143,145,148.
Lab: <b>Test #3</b>			
13-3	Cspk.	Discrete Probability I	Cspk. 112/1-4,6,8.
14-1	Cspk.	Discrete Probability II	Cspk. 120/1-6,9.
14-2	8.6	Distribution Functions	8.6/10,11,13-17,19,20.
Lab: Expected value, Normal Data Sets part I			
14-3	8.7	Probability Distributions	8.7/1,2,4-7,13,14.
15-1	8.7	Normal Distributions	8.7/3,9-12.
15-2		<i>Teacher's Choice</i>	
Lab: Normal Data Sets part II			
15-3		Review	
16-1 <b>Test #4</b>			
16-2		<i>TCE Day</i>	