

### Fall 2009 Math 32L Syllabus

Textbook: Calculus (4th ed), by Hughes-Hallett, et al.

Day	Section	Topic	Homework
1-1	Intro.	Selected topics from Math 31L	Review as needed.
1-2	<i>Course Pk</i>	Probability #1: Events	<i>Course Pack</i> 1,2,4,6,8.
Lab:		Air Pollution: Fine Particulate Matter	
1-3	<i>Course Pk</i>	Prob. #2: Random Variables	<i>Course Pack</i> 1-6,9,10.
2-1	<i>Course Pk</i>	Prob. #3: Expected Values	<i>Course Pack</i> 1-3,5,8,10,11,13.
2-2	9.2	Geometric series	9.2/1-3,5,7-9,11-13,20,21,24,26,28,31.
Lab:		Probability and Geometric Series	
2-3	<i>Course Pk</i>	Series#1: (seq/partial sums)	<i>Course Pack</i> 1-4,6,7; 9.1/17,38,39; 9.2/10,14,25,32.
3-1	7.1	Integration by Substitution	7.1/1-3,5,6,9,11,17,18,20,24,31,33,37,49-51,59,77,81-83,87,89.
3-2	7.2	Integration by Parts	7.2/1,4,5,8,11,12,14,23,27,38,40,43,52-53.
Lab:		Integrating to Infinity	
3-3	7.4	Alg. Identities	7.4/1,2,8,9,20,23,24,32,35,40,57,63,64.
4-1	7.5,7.6	Approximating Definite Integrals	7.5/1,2,10-13,21,23; 7.6/3e ( <i>only with n=2,4,8</i> ), 4 ( <i>only with n=2,4</i> ),5c,.
4-2	<i>Course Pk</i>	Series#1: ( <i>n</i> -th term test)	<i>Course Pack</i> 5,8-10; 9.2/18,19,29; 9.3/13,22,
		9.3 (through example #1)	24,28,33.
Lab:		Normal Data Sets, Part 1; Series Worksheet,	Part 1 (p 219 <i>Course Pack</i> )
4-3	<i>Course Pk</i>	Series #3: Integral Test	<i>Course Pack</i> 1,2a,b,3a,5a,b,c,6a,b.
5-1	9.4	Comp/Abs Conv/Lim Comp	9.4/1-7,9,24,26-28,32,48,50,52,66; 9.3/16;
			<i>Course Pack</i> p202/4a,c.
5-2	Review		
Lab:		Test #1	
5-3	7.7,7.8	Improper Integrals	7.7/2,4,7,9,10,17,22,29,38,43,44; 7.8/1,2,8,10,12,19,21,26,28,32,33; work all problems in the "Background" section of the lab, <i>Present Value and Future Value</i> (on pages 109-111 of the <i>Course Pack</i> ).
6-1	8.1	Areas and Volumes	8.1/1,3,4,7-10,16,18,19,24,25.
6-2	8.2	Arc length	8.2/10-12,18-21,28-31,36,39,41,42.
Lab:		Present Value and Future Value	
6-3	8.7	Distribution Functions	8.7/7,8,10,11,13-17,19,20; <i>Course Pk</i> p220/11c,d,g.
7-1	<i>Fall Break</i>		
7-2	8.8	Probability; Distributions	8.8/1,2,4-7,13,14.
Lab:		Varying Density, part III; gateway practice	
7-3	8.8	Normal Distributions	8.8/3,8-12.

Revised 17 August 2009