

Math 112

## SCHEDULE

Fall 2006

**Text:** S.T. Tan, *College Mathematics for the Managerial, Life, and Social Sciences; 6th Edition***Topics:**

Functions, Models, Limits, Continuity, Derivatives  
 Differentiation Rules; Power rule, Product/quotient rules, Chain Rule  
 Marginal Analysis, Higher-order derivatives, Implicit differentiation, Related rates, Differentials  
 Increasing/decreasing functions, Relative/Absolute extrema, Concavity, Inflection pts., Curve sketching  
 Derivatives of  $e^x$  and  $\ln x$ , Antiderivatives, Integration by substitution, Fundamental thm of Calculus  
 Functions of several variables, Partial Derivatives

No class on the following days:

Tuesday 10/24/06 (University Holiday)    Thursday 11/23/06 (Thanksgiving break)

<b>Week 1</b>	Tuesday, Aug 29	10.1 Functions	10.2 Algebra of functions	
	Thursday, Aug 31	10.3 Models		HW Questions/Answers
<b>Week 2</b>	Tuesday, Sept 5	10.4 Limits and continuity	10.5 one-sided limits	
	Thursday, Sept 7	10.5 Continuity	10.6 Def. of derivatives	HW Questions/Answers
<b>Week 3</b>	Tuesday, Sept 12	<b>Quiz 1:</b> Sec. 10.1-10.5	11.1 Power Rule	
	Thursday, Sept 14	11.2 Product/Quotient Rules	11.3 Chain Rule	HW Questions/Answers
<b>Week 4</b>	Tuesday, Sept 19	11.3 Chain Rule (Con't)	11.4 Marginal Analysis	
	Thursday, Sept 21	<b>Quiz 2:</b> Sec. 10.6-11.4	11.5 Higher-order derivs.	HW Questions/Answers
<b>Week 5</b>	Tuesday, Sept 26	11.6 Implicit derivatives	11.7 Differentials	
	Thursday, Sept 28	<b>Exam 1:</b> Sec. 10.1-11.5		
<b>Week 6</b>	Tuesday, Oct 3	11.7 Differentials (Con't)	11.7 Differential Approx.	
	Thursday, Oct 5	12.1 Increasing/Decreasing	Go over Exam 1	HW Questions/Answers
<b>Week 7</b>	Tuesday, Oct 10	<b>Quiz 3:</b> Sec. 11.6-11.7	12.1 Relative Extrema	
	Thursday, Oct 12	12.2 Concavity	12.2 Inflection Pts.	HW Questions/Answers
<b>Week 8</b>	Tuesday, Oct 17	Questions on 12.2	12.3 Curve Sketching	
	Thursday, Oct 19	<b>Quiz 4:</b> Sec. 12.1-12.2	Short class	or no class
<b>Week 9</b>	Tuesday, Oct 24	<b>School Holiday</b>	Review on your on	
	Thursday, Oct 26	12.3 Curve Sketching	Questions on 12.3	HW Questions/Answers
<b>Week 10</b>	Tuesday, Oct 31	12.4 Absolute Extrema	12.5 Word Probs. Extrema	
	Thursday, Nov 2	<b>Quiz 5:</b> Sec. 12.3-12.4	12.5 Word Problems	HW Questions/Answers
<b>Week 11</b>	Tuesday, Nov 7	Questions on 12.5	13.3 Derivatives w/ $e^x$	
	Thursday, Nov 9	<b>Exam 2:</b> Sec. 11.6 - 12.5		
<b>Week 12</b>	Tuesday, Nov 14	Questions on 13.3	13.4 Derivatives w/ $\ln x$	
	Thursday, Nov 16	Go over Exam 2	14.1 Antiderivatives	HW Questions/Answers
<b>Week 13</b>	Tuesday, Nov 21	<b>Quiz 6:</b> Section 13.1-14.1	14.2 Int. by Substitution	
	Thursday, Nov 23	<b>Thanksgiving</b>	No school	
<b>Week 14</b>	Tuesday, Nov 28	14.2 Substitution	14.3 Definite Integrals	
	Thursday, Nov 30	14.3 Area	14.7 Applications	HW Questions/Answers
<b>Week 15</b>	Tuesday, Dec 5	14.4 Fundamental Thm	16.1 Several Variables	
	Thursday, Dec 7	<b>Quiz 7:</b> Sec. 14.2-14.7	16.2 Partial derivatives	HW Questions/Answers
<b>Week 16</b>	Tuesday, Dec 12	<b>Final at 2 pm</b>	For 3-4:15 pm Class	
	Thursday, Dec 14	<b>Final at 11 pm</b>	For 1:35-2:50 pm Class	

*Topics and dates on this schedule may be changed during the semester.*