

## **MATH 1120-007 Fall 2009**

TR 9:30 am - 10:45 am Denny 109

Text: Applied Calculus for the Managerial, Life, and Social Sciences, 8th Edition, by S.T. Tan.

Instructor: Prof. You-lan Zhu

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Office Hours: TR 8:50 am - 9:20 am & 10:45 am - 11:30 am and by appointment

Homework will be assigned every day and will be collected and graded once per week. During the first class of a week students should turn in the homework problems assigned during the previous week. Late homework problems will not be accepted. Homework counts 20% of your grade.

There will be two tests and a final. No makeup tests will be given without a reasonable, documented excuse. The two tests and the final count 50% and 30% of your grade respectively. You should expect that an average of 90% or better will be needed to get an A, 89-80% for a B, 79-70% for a C, 69-60% for a D, and otherwise an F will be given.

As with most mathematics classes, the material covered in one class usually depends heavily on the material from previous classes. It is very important that you try to keep up with class assignments. If you have any questions, do not hesitate to ask me.

P.S.

	Estimated Dates	Percentages	Chapters
Test 1	9/22 or so	22.5%	1-3
Test 2	11/5 or so	22.5%	4-5
Final	12/17 (8:00a.m.-10:30a.m.)	35%	1-6

## Preliminary Syllabus for MATH 1120 Calculus

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Lecture	Section(s)	Topics
1	1.1-1.4, 2.1	Review of Chapter 1 and Functions
2	2.2-2.3	The Algebra of Functions and Mathematical Models
3	2.4-2.5	Limits and Continuity
4	2.6	Derivative
5	3.1	Basic Rules of Differentiation
6	3.2	The product and Quotient Rules
7	3.3	The Chain Rule
8	3.4-3.5,3.7	Marginal Functions and Higher-Order Derivatives
9		Test I
10	4.1	Applications of the First Derivative
11	4.2	Applications of the Second Derivative
12	4.3	Curve Sketching
13	4.4	Optimization I
14	4.5	Optimization II
15	5.1	Exponential Functions
16	5.2	Logarithmic Functions
17	5.3	Compound Interest
18	5.4	Differentiation of Exponential Functions
19	5.5	Differentiation of Logarithmic Functions
20	5.6	Mathematical Models
21		Test II
22	6.1	Antiderivatives
23	6.2	Integration by Substitution
24	6.3	Area and the Definite Integral
25	6.4	Fundamental Theorem of Calculus
26	6.5	Evaluating Definite Integrals
27	6.6	Area between Two Curves
27	6.7	Applications to Business
29		Review
30		Catch Up
31		Final Examination