

Math 2200: Calculus (MWF 10:10-11:00)

Fall 2003

Instructor: Daniel K. Nakano

Office: Boyd Graduate Center, Room 445

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Office Hours: M,W,F 1:00-2:00pm

Text: Edwards & Penney, Calculus with Analytic Geometry, 6th edition

COURSE SCHEDULE

Week 1: 8/18-8/22

§2.1-2.2	Tangent lines, slope,	(2.1) 1,4,7,13,17,20,26,29,34
	Limits	(2.2) 2,3,8,13,21,26,30,33,53,61

Week 2: 8/25-8/29

§2.3-2.4	Limits, Continuity	(2.3) 1,4,7,19,24,27,35,37,48,55
		(2.4) 3,12,13,30,32,45,49,51,55,66

Week 3: 9/3-9/5

§3.1-3.2	Derivatives, rate of change,	(3.1) 2,5,13,18,23,27,36,49,51,52
	Basic differentiation rules	(3.2) 3,5,15,22,39,47,50,52,58

Week 4: 9/8-9/12

§3.3-3.4	Chain rule, derivatives of	(3.3) 1,4,12,13,20,28,33,49,57,62
	algebraic functions	(3.4) 1,4,17,28,37,47,48,63,64,65

Week 5: 9/15-9/19

REVIEW
MIDTERM (material through §3.4)

Week 6: 9/22-9/26

§3.5-3.6	Max-min on a closed interval,	(3.5) 5,7,13,18,19,27,33,41,44,47
	Applied max-min problems	(3.6) 1,2,10,11,16,21,30,44

Week 7: 9/29-10/3

§3.7-3.8 Derivatives of trigonometric functions, exponentials, logarithms, inverse functions (3.7) 5,11,20,33,51,58,64,70,77,81 (3.8) 1,7,13,23,33,38,48,58,59

Week 8: 10/6-10/10

§3.9 Implicit differentiations, related rates (3.9) 1,6,9,17,25,31,34,37,41,44 51,54,56,58,63,67

Week 9: 10/13-10/17

§4.1-4.2 Applications of the derivative, increments, differentials, linear approximation (4.2) 1,4,7,14,17,22,25,30,37,42 44,45,49,50

Week 10: 10/20-10/24

REVIEW
MIDTERM (covers through §4.2)

Week 11: 10/27-10/29

§4.3 Increasing and decreasing functions, Mean value theorem (4.3) 3,7,10,11,13,22,25,29,33,42,47,58

Week 12: 11/3-11/7

§4.4-4.5 First derivative test, applications, curve sketching (4.4) 2,7,19,26,29,33,35,41,43,44,46 (4.5) 2,4,6,9,15,20,25,38,49,51,

Week 13: 11/10-11/14

§4.6-4.7 Higher derivatives, concavity, curve sketching, asymptotes (4.6) 2,7,10,20,27,31,36,44,50,65,76,87 (4.7) 1,9,13,22,30,34,40,45,47

Week 14: 11/17-11/21

§5.1-5.2

Integrals, antiderivatives,
initial value problems

(5.2) 1,5,12,17,25,33,35,42,49,52,60,63
64,68,73,79

Week 15: 11/24

§4.7

REVIEW

Week 16-17: 12/1-12/8

Additional topics, REVIEW

Final: Friday, December 12th, 2003 8:00-11:00am.

Grading Policy

Final: 40%

Midterms (2): 20% each

Homework: 20%

Remarks:

1) I highly recommend that you read your book before coming to class. You will probably not understand everything the author says, but it will help you to keep up during the lectures. Success in this class will depend on your ability to read outside of class.

2) Homework for the previous week is due on the following Wednesday.