

DIXIE STATE COLLEGE - - Spring 2010
MATHEMATICS DEPARTMENT

Course Number: MATH 1220**Course Title:** Calculus 2**Section Number:** 02**Meeting Time:** MTWR 1:00 – 1:50**Room Number:** NIB 136

Jan 11 to May 3

Instructor: Ross Decker**Office Room Number:** NIB 139**Office Phone Number:** 652-7763**Office Hours:** 9 to 10 daily, or by appointment**Text:** Calculus—Concepts and Contexts (4th Edition)**Author:** James Stewart**Prerequisites:** C or better in **MATH 1210**.

Exam dates and points possible are as follows:

Exam 6	January 27-29	100 points
Exam 7	February 9-11	100 points
Exam 8	March 16-18	100 points
Exam 9	April 7-9	100 points
Exam 10	April 22-26	100 points
Final Exam	May 3 12:00-2:00	200 points
Homework	(5 points each)	<u>185 points</u>
TOTAL POINTS:		885 points

ATTENDANCE: Any student who misses the first two days of class will be dropped from the class.**DISHONESTY:** If it is determined that you cheated, you will receive a zero for that exam.

If cheating occurs a second time, you will receive an F for the course.

DISABILITIES: If you are a student with a medical, psychological, or learning disability, and would like accommodations or think you might have a disability, contact the Disability Resource Center (652-7516) in the Student Services Center, Room 201. The Disability Resource Center will determine eligibility based on your professional documentation and determine the appropriate accommodations related to your disability.**GRADES:** Your semester grade will be based on the following scale: **A**(92-100%), **A-**(89-92%), **B+**(86-89%), **B**(82-86%), **B-**(79-82%), **C+**(76-79%), **C**(72-76%), **C-**(69-72%), **D+**(66-69%), **D**(62-66%), **D-**(59-62%), **F**(0-59%)**GENERAL REMARKS:** It is the responsibility of each student to make time each day to read the text, attempt all homework problems, study for exams, and get extra help. Your work should be neat and easily read. Problems will be graded more for the work shown than for the final answer. Assignments should be considered a minimum and many students should work additional problems to reach mastery. Course schedules, assignments, and exam dates are subject to change as circumstances dictate.

COURSE OBJECTIVES

All mathematics classes at Dixie State College will:

1. Require students to perform mathematical processes including fractions, percentages, decimals, proportions/ratios, algebraic equations and/or calculus techniques.
2. Provide students with application problems that use a variety of methods including arithmetical, algebraic, and geometric methods.
3. Challenge students to make inferences from mathematical models that include formulas, graphs, and tables.
4. Provide students with real-life applications that use a variety of mathematical functions.

Upon successful completion of MATH 1210, a student will demonstrate through testing, the ability to:

1. Solve separable differential equations.
2. Use the definite integral to find areas between curves, and volumes of solids of revolution.
3. Find the length of a curve.
4. Find the area of a surface of revolution.
5. Find moments and centers of mass.
6. Perform polar coordinate transformations and graph the results.
7. Use calculus techniques on equations defined with parametric and polar coordinates.
8. Graph conics in both rectangular and polar coordinates.
9. Use various tests to determine convergence/divergence of series.
10. Represent functions as power series.
11. Perform vector arithmetic, including dot products and cross products.
12. Determine lines and planes in space.
13. Represent coordinates and equations in rectangular, cylindrical, and spherical format.
14. Use plane and space vectors to solve applications in geometry and physics.
15. Use space curves to analyze the motion of an object.

MON	TUE	WED	THUR	
1/11 6.1	1/12 6.2	1/13 6.3	1/14 6.4	6.1 1,3,11,13,21,25,26,29,33,35,39,41 6.2 1-17odd, 25,26,28,31,33,40,45
1/18 MLK Day	1/19 6.5	1/20 6.6A	1/21 6.6B	6.3 1-17odd,21-25o,29-33o 6.4 1,2,3-9o,23,24,29
1/25 6.6C	1/26 6.7	1/27 Review Ch 6	1/28 Exam 6	6.5 1-7o,10-13,15 6.6A 1-11o,13-15,17,19,20
2/01 7.1	2/02 7.2	2/03 7.3	2/04 7.3(cont.)	6.6B 31-35,37,37,40 6.6C 43-45,47,49,50
2/08 7.4	2/09 Review Ch 7	2/10 Exam 7	2/11 8.1	6.7 1-9odd, 10,15,17 6R 1,4,9-11,16,19-25o,28-34
2/15 Presidents Day	2/16 8.2A	2/17 8.2B	2/18 8.3	7.1 1,2,5,6,8,11,13 7.2 1,3-7,10,15,27
2/22 8.4	2/23 8.4(cont.)	2/24 8.5	2/25 8.5(cont.)	7.3 1,3,9-12,13-21o,29-33o,45,47,48 7.4 3,4,6,8,11,13,15,19,20,22
3/01 8.6	3/02 8.6(cont.)	3/03 8.7	3/04 8.7(cont.)	7R 1,5-11o,15,16,19,20 8.1 3-8,9-33o,49,50,52
3/08 S P R I N G	3/09	3/10 B R E A K	3/11	8.2A 3,5,9-17odd,18,19-29odd 8.2B 31,33,37,39,45,52ab
3/15 8.8	3/16 Review Ch 8	3/17 Exam 8	3/18 9.1	8.3 3,4,5-27odd, 8.4 1-3,5-9o,15,21,25-29o,33,37-39
3/22 9.2	3/23 9.3	3/24 9.3(cont.)	3/25 9.4	8.5 3-23odd 8.6 3-9odd,13,17,19,23,27
3/29 9.5A	3/30 9.5B	3/31 9.6	4/01 A.H-1	8.7 5-9,11,13,14,21-25,29,30,35,29,47,51,55 8.8 2,8,14a,20
4/05 A.H-2	4/06 9.7	4/07 Review Ch 9	4/08 Exam 9	8R 1-7,10-12,14-20,23-27,31,33,36-39,43,45-47 9.1 1-31odd,18,39 9.2 3-31odd,30,32 9.3 3-9o,14,17-23o,24,26,27,29,32,35,37,43
4/12 10.1	4/13 10.2	4/14 10.2(cont.)	4/15 10.3A	9.4 5-7,13-27odd,32 9.5A 3,5,7,8,13-19odd
4/19 10.3 B	4/20 10.4	4/21 10.4(cont.)	4/22 Review Ch 10	9.5B 21-43o,55,57 9.6 1,3,9-17odd,21-23,29
4/26 Exam 10	4/27 Final Review	4/28 Final Review	4/29 Final Review	A-H.1 1-19odd,23-27o,31,41,48,49,53 A-H.2 1-31odd,35-39o 9.7 1-23odd
5/03 Final Exam (12:00-2:00)				
9R 1,3-6,9-26,29-43		10.2 3,5,6,9-23odd,30,33,37		10.3B 11,13,37,39,41,43
10.1 1-9odd,15,17,19-24,36		10.3A 1-3,7,9,15-21odd,24,26		10.4 3,6,9-27odd,31,33
				10R 1-6,8-20

Testing Center Hours

Monday
1 PM to 10 PM

Tuesday, Wednesday, Thursday, Friday
9 AM to 10 PM

Saturday
2 PM to 10 PM

Sunday
4 PM to 10 PM