

Course Number: MATH 1220**Section Number:** 01**Room Number:** SNOW 147**Instructor:** Ross Decker decker@dixie.edu**Phone Number:** 862-0688**Text:** Calculus—Concepts and Contexts (4th Edition)**Prerequisites:** C or better in **MATH 1210**.**Course Title:** Calculus 2**Meeting Time:** MTWR 9:00 – 9:50

Aug 24 to Dec 18

Office Room Number: SNOW 142**Office Hours:** 11 to 12 daily, or by appointment**Author:** James Stewart

Exam dates and points possible are as follows:

Exam 6	September 10-14	100 points
Exam 7	September 22-24	100 points
Exam 8	October 20-22	100 points
Exam 9	November 17-19	100 points
Exam 10	December 7-9	100 points
Final Exam	Dec 18 9:30-11:30	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 suspect or are aware that you have a disability that may affect your success in the course, you are strongly encouraged to contact the Disability Resource Center (DRC) located in the North Plaza Building. The disability will be evaluated and eligible students will receive assistance in obtaining reasonable accommodations. Phone # 435-652-7516.**DISCRIMINATION:** DSU seeks to provide an environment that is free of bias, discrimination, and harassment. If you have been the victim of sexual harassment/misconduct/assault, we encourage you to report this to the college's Title IX Director: Cindy Cole 652-7731, cindy.cole@dixie.edu. If you report to a faculty member, she or he must notify the Title IX Director about the basic facts of the incident.**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 1220, 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	
8/24 6.1	8/25 6.2	8/26 6.3	8/27 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
8/31 6.5	9/01 6.6A	9/02 6.6B	9/03 6.6C	6.3 1-17odd,21-25o,29-33o 6.4 1,2,3-9o,23,24,29
9/07 Labor Day	9/08 6.7	9/09 Review Ch 6	9/10 Review Ch 6	6.5 1-7o,10-13.15 6.6A 1-11o,13-15,17,19,20
9/14 7.1	9/15 7.2	9/16 7.3	9/17 7.4	6.6B 31-35,37,39,40 6.6C 43-45,47,49,50
9/21 Review Ch 7	9/22 Review Ch 7	9/23 8.1	9/24 8.2A	6.7 1-9odd, 10,15,17 6R 1,4,9-11,16,19-25o,28-34
9/28 8.2B	9/29 8.3	9/30 8.4	10/01 8.4(cont.)	7.1 1,2,5,6,8,11,13 7.2 1,3-7,10,15,27
10/05 8.5	10/06 8.5(cont.)	10/07 8.6	10/08 8.6(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
10/12 8.7	10/13 8.7(cont.)	10/14 8.8	10/15 Fall Break	7R 1,5-11o,15,16,19,20 8.1 3-8,9-33o,49,50,52
10/19 Review Ch 8	10/20 Review Ch 8	10/21 9.1	10/22 9.2	8.2A 3,5,9-17odd,18,19-29odd 8.2B 31,33,37,39,45,52ab
10/26 9.2(cont.)	10/27 9.3	10/28 9.4	10/29 9.4(cont.)	8.3 3,4,5-27odd, 8.4 1-3,5-9o,15,21,25-29o,33,37-39
11/02 9.5A	11/03 9.5B	11/04 9.6	11/05 A.H-1	8.5 3-23odd 8.6 3-9odd,13,17,19,23,27
11/09 A.H-2	11/10 A.H-2(cont.)	11/11 9.7	11/12 9.7(cont.)	8.7 5-9,11,13,14,21-25,29,30,35,29,47,51,55 8.8 2,8,14a,20
11/16 Review Ch 9	11/17 Review Ch 9	11/18 10.1	11/19 10.2	8R 1-7,10-12,14-20,23-27,31,33,36-39,43,45-47 9.1 1-31odd,18,39
11/23 10.2(cont.)	11/24 10.3 A	11/25 T H A N K S G I V I N G		9.2 3-31odd,30,32 9.3 3-9o,14,17-23o,24,26,27,29,32,35,37,43
11/30 10.3B	12/01 10.4	12/02 10.4(cont.)	12/03 Review Ch 10	9.4 5-7,13-27odd,32 9.5A 3,5,7,8,13-19odd
12/07 Review Ch 10	12/08 Final Review	12/09 Final Review	12/10 Final Review	9.5B 21-43o,55,57 9.6 1,3,9-17odd,21-23,29
			12/18(Friday) Final Exam 9:30-11:30	A-H.1 1-19odd,23-27o,31,41,48,49,53 A-H.2 1-31odd,35-39o 9.7 1-23odd
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,33,35 10R 1-6,8-20

Testing Center Hours

Monday - Friday
9 AM to 10 PM

Saturday
2 PM to 10 PM

Sunday
4 PM to 10 PM