

DIXIE STATE COLLEGE - - Spring 2009  
MATHEMATICS DEPARTMENT

**Course Number:** MATH 2210**Section Number:** 01**Room Number:** NIB 136**Instructor:** Ross Decker**Office Phone Number:** 652-7763**Text:** Calculus—Concepts and Contexts (3rd Edition)**Prerequisites:** C or better in **MATH 1220****Course Title:** Multivariable Calculus**Meeting Time:** MWF 8:00 – 8:50 AM

Jan 5 to Apr 27

**Office Room Number:** NIB 139**Office Hours:** 10:00-10:50 Daily (or by appointment)**Author:** James Stewart

Exam dates and points possible are as follows:

Exam 11A	Jan 16-21	100 points
Exam 11B	Jan 30 – Feb 3	100 points
Exam 12A	Feb 13-18	100 points
Exam 12B	Mar 6-10	100 points
Exam 13A	Mar 27-31	100 points
Exam 13B	Apr 15-17	100 points
Final Exam	April 27 (7:30-9:30)	200 points
Homework	(5 points per assignment)	<u>125 points</u>
<b>TOTAL POINTS:</b>		<b>925 points</b>

**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 2210, a student will demonstrate through testing, the ability to:

1. Use plane and space vectors to solve applications in geometry and physics.
2. Use space curves to analyze the motion of an object.
3. Use contour diagrams to analyze the behavior of a function of several variables.
4. Use partial derivatives to solve optimization problems.
5. Set up and compute double and triple integrals in order of integration using rectangular coordinates.
6. Set up and compute double and triple integrals using polar, cylindrical, and spherical coordinates.
7. Use line integrals to compute the work done by a vector field along a curve.
8. Use surface integrals to compute the flux of a vector field through a surface.
9. Use multiple integrals to calculate some line and surface integrals.

<b>MON</b>	<b>WED</b>	<b>FRI</b>	
<b>1/5</b> 11.1	<b>1/7</b> 11.2	<b>1/9</b> 11.3	<b>11.1</b> 1,2,4,6,9,10,11,15,17,31-36 <b>11.2</b> 1,2,5,7,11,13,15,17,25,28,30
<b>1/12</b> 11.4	<b>1/14</b> Review 11A	<b>1/16</b> Exam 11A	<b>11.3</b> 1,2,4,6,9,17,19,23,25,31,35,37,47-57odd,62bc,63 <b>11.4</b> 1,4,9,10,13,18,23,25,26,27,29,30,33
<b>1/19</b> MLK Day	<b>1/21</b> 11.5	<b>1/23</b> 11.6	<b>11.5</b> 1-13o,16,18,19,20,21,22,23,26,27,28,30,31,34,37,41 <b>11.6</b> 1,5,7,14,19,24,25,27,30-32,35,41
<b>1/26</b> 11.7	<b>1/28</b> 11.8	<b>1/30</b> Review 11B	<b>11.7</b> 1,3,5,7,9,12,15,19,23,31,32,35,39,40,43 <b>11.8</b> 5,13,15,23,29,33,34
<b>2/2</b> Exam 11B	<b>2/4</b> 12.1	<b>2/6</b> 12.2	<b>11.R</b> 1,2,5,6,9,10,11a,13-26,29,32-37,40,42-48,50-65 <b>12.1</b> 3,6,10
<b>2/9</b> 12.3	<b>2/11</b> 12.4	<b>2/13</b> Review 12A	<b>12.2</b> 1,3,5,9,11,16,17,19,24,25 <b>12.3</b> 1,3,7,11,12,13,17,18,19-37odd,46,pg 912 #31
<b>2/16</b> Presidents Day	<b>2/18</b> Exam 12A	<b>2/20</b> 12.5	<b>12.4</b> 1,3,4,6,11,14,19,21,25,27,30 <b>12.5</b> 1,5,7,9,10,14,16
<b>2/23</b> 12.6	<b>2/25</b> 12.7	<b>2/27</b> 12.8	<b>12.6</b> 1,5,6,7,10,13 <b>12.7</b> 2,3,9,10,11,13,15,17,18,23,24,29,36,41
<b>3/2</b> 12.9	<b>3/4</b> Review 12B	<b>3/6</b> Exam 12B	<b>12.8</b> 1-7,9,11,15,16,19,21,25 <b>12.9</b> 1,3,5,7,8,9,11,15,19,21
<b>3/9</b> 13.1	<b>3/11</b> 13.2	<b>3/13</b> 13.3	<b>12.R</b> 1,3,5,9,10,14,17,20,23-35,37,39,40,42,44,47,49-51, <b>12.4</b> #10,27 <b>13.1</b> 3-31eoo,33
<b>3/16</b> S P R I N G	<b>3/18</b> B R E A K	<b>3/20</b>	<b>13.2</b> 1-35odd <b>13.3</b> 3-23odd,29,31
<b>3/23</b> 13.4	<b>3/25</b> Review 13A	<b>3/27</b> Exam 13A	<b>13.4</b> 1-19odd <b>13.5</b> 1,5,7-10,11-19odd
<b>3/30</b> 13.5	<b>4/1</b> 13.5(cont.)	<b>4/3</b> 13.6	<b>13.6</b> 5-29eoo,33,34 <b>13.7</b> 3-17odd
<b>4/6</b> 13.7	<b>4/8</b> 13.7(cont.)	<b>4/10</b> 13.8	<b>13.8</b> 1-17odd <b>13.R</b> 2-19,25-35
<b>4/13</b> Review 13B	<b>4/15</b> Exam 13B	<b>4/17</b> Review for Final	
<b>4/20</b> Review for Final	<b>4/22</b> Review for Final		
<b>4/27</b> Final Exam 7:30 – 9:30			

#### 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

## Important Dates for Spring Semester 2009

Jan 5	Classes Begin
Jan 7	Last Day to Add Without Signature
Jan 19	Martin Luther King Day
Jan 20	\$50 Late Registration/Payment Fee
Jan 27	Last Day for Refund
Jan 27	Last Day to drop without receiving a W grade
Jan 27	Pell Grant Census
Jan 28	Students dropped for non-payment
Jan 30	Last Day to Add Classes
Feb 16	Presidents Day
Feb 23	Mid-Term Grades Due
Feb 27	Last Day to Drop/Audit Classes
Mar 16-20	Spring Break
Mar 27	Last Day for Complete Withdrawal
Apr 23	Classwork Ends
Apr 24-30	Final Exams
May 1	Commencement