DIXIE STATE COLLEGE - - Fall 2017 MATHEMATICS DEPARTMENT

Course Number: MATH 1100 Course Title: Business Calculus **Section Number:** 50 Meeting Time: T/Th 5:15 - 6:30 PMRoom Number: Snow 125

Aug 21 – Dec 11

Office Room Number: Snow 125 **Instructor**: Robert Reimer Contact Information: 4354671153 or robert.reimer@washk12.org or reimer@dixie.edu

MyMathLab Course ID: reimer64402 Prerequisites: C or better in MATH 1050 or ACT of 25 or higher

Exam dates and points possible are as follows:

Exam 1 Sep 13-17 100 points 100 points Exam 2 Oct 2-8 Exam 3/4 Nov 3-8 100 points Exam 5/6 Dec 4-8 100 points Final Exam TBA in Testing Center 200 points (5 points per assignment) Homework 205 points TOTAL POINTS: 805 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 help students to:

- 1. Employ mathematical techniques in computational problems.
- 2. Interpret mathematical models.
- 3. Construct quantitative, logical arguments.
- 4. Apply mathematical knowledge to real world problems.
- 5. Communicate in the mathematical language through the use of proper notation and terminology.
- 6. Explore and analyze mathematical concepts, using technology as appropriate.

Upon successful completion of MATH 1100, a student will demonstrate through testing, the ability to:

- 1. Discuss and analyze the concept of limits and the interrelationships of the graphic, numeric, and symbolic approaches to limits.
- 2. Discuss and analyze the interpretations of functions and their first and second derivatives.
- 3. Apply basic calculus techniques to data and functions that serve to model real-life applications of business, economics, social science, and architecture careers.
- 4. Apply the definite integral as the limit of a sum to applications in the areas of business, economics, sociology, and ecology.

Disability Accommodations: Students with medical, psychological, learning or other disabilities desiring reasonable academic adjustment, accommodations, or auxiliary aids to be successful in this class will need to contact the DISABILITY RESOURCE CENTER Coordinator for eligibility determination. Proper documentation of impairment is required in order to receive services or accommodations. DRC is located in the North Plaza Building. Visit or call 652-7516 to schedule appointment to discuss the process. DRC Coordinator determines eligibility for and authorizes the provision of services.

College resources: Several college resources are available to help you succeed.

Check out the links for each one to get more information.

If you need help understanding the content of your courses, go to the Tutoring Center located in the Holland Building, Room 431.

There is a schedule of what courses have tutors at what times outside the door. You can also visit them online at http://dsc.dixie.edu/tutoring/

In addition, we have math tutors available downstairs in the SNOW Bldg MF 9-7, TWR 9-8, Sa 9-6.

If you need to use a computer to do schoolwork on campus, go to the Holland Building or the Smith Computer Center.

If you are assigned to take a test in the Testing Center, go to the North Plaza. You can get information on their website at http://new.dixie.edu/testing/

<u>Classroom expectations</u>: It is the responsibility of an instructor to manage the classroom environment to ensure a good learning climate for all students. This means not talking when the teacher is talking, following instructions, and speaking and acting respectfully to the professor and fellow students. If your behavior is disruptive, I will first let you know verbally that you are behaving inappropriately. If it continues, I will send you written notice that your behavior must change. As a last resort, I will drop you from the class. For more details, please see the disruptive behavior policy at: http://www.dixie.edu/humanres/policy/sec3/334.html

<u>Academic integrity</u>: I believe that most students are honest, and I don't want to punish everyone for the few that aren't. However, I will not tolerate cheating, and if I discover that it has occurred, a zero grade will be given for that assignment or exam, and you will not be allowed to make it up. Repeated or aggravated offenses will result in failing the course.

- To register for MyMathLab (MML), go to http://www.mymathlab.com/ and
 - ✓ Under the heading "Register", click "Student".
 - \checkmark When you are asked for the **COURSE ID** enter **reimer64402**
 - ✓ Follow the instructions to either create an account, or sign in if you have an existing account. If you are creating a new account, you will need to purchase a student **ACCESS CODE** from either the publisher as you are registering or ahead of time from the bookstore. Check both places to see which is less expensive.
 - √ When you enter your **email account**, please make sure you use the email that you check the most often.
 - ✓ If you have questions, please go to http://www.pearsonmylabandmastering.com/northamerica/students/get-registered/index.html and watch the video found by scrolling towards the bottom of the screen or you may contact customer support service (http://www.mymathlab.com/student-support).
 - \checkmark A 14-day free trial is available through the MML website.

Week 1 8/22 1.1	1.2	1.3	
Limits: Numerical & Graphical	Limits: Algebraic, Continuity	Average Rate of Change	
Week 2 8/29 1.4	1.5	1.6	
Differentiation with Difference Quotient	Power Rule, Sum Rule	Product Rule, Quotient Rule	
Week 3 9/5	1.7	1.7 (continued)	
LABOR DAY	Chain Rule	Chain Rule	
Week 4 9/12 1.8	1.R	2.1	
Higher Order Derivatives	Chapter 1 Review	Max & Min (1st Derivative)	
Week 5 9/19 2.2	2.4	2.5	
Max & Min (2 nd Derivative)	Absolute Max & Min	Max/Min Problems (Business & Economics)	
Week 6 9/26 2.6	2.7	2.8	
Marginals and Differentials	Elasticity	Implicit Differentiation, Related Rates	
Week 7 10/3 2.R	3.1	3.2	
Chapter 2 Review	Exponential Functions	Logarithmic Functions	
Week 8 10/10 3.3	3.4		
Uninhibited & Limited Growth Models	Decay Problems	FALL BREAK	
Week 9 10/17 3.5	3.6	4.1	
Derivatives: a^x , $log_a x$	Amortization	Antidifferentiation	
Week 10 10/24 4.2	4.3	4.3 (continued)	
Antiderivatives as Areas	Area and the Definite Integral.	Area and the Definite Integral.	
Week 11 10/31 4.4	4.5	4.6 Integration By Parts	
Properties of Definite Integrals	Substitution Method		
Week 12 11/07 4.6 (continued)	5.1	5.2	
Integration By Parts	Consumer Surplus & Producer Surplus	Integrating Growth & Decay Models	
Week 13 11/14 5.3	Statistics Worksheet	5.5	
Improper Integrals	Central Tendency, Variance, Standard Dev.	Probability, Normal Distribution	
Week 14 11/21 5.7			
Differential Equations	THANKSGIVING	BREAK	
Week 15 11/28 6.1	6.2	6.3	
Functions of Several Variables	Partial Derivatives	Max/Min of Multivariable Functions	
Week 16 12/05 5/6.R			
Chapter 5&6 Review	Review for Final Exam	Review for Final Exam	
	FINAL EXAM TBA IN TESTING CENTER		

<u>Testing Center Hours</u>

<u> Monday - Friday</u>	<u>Saturday</u>		<u>Sunday</u>
9 AM to 10 PM	2 PM to 10 PM		4 PM to 10 PM
Exam 1	Sep 13-17	100 points	
Exam 2	Oct 2-8	100 points	
Exam 3/4	Nov 3-8	100 points	
Exam 5/6	Dec 4-8	100 points	
Final Exam	TBA in Testing Center	200 points	
Homework	(5 points per assignment)	205 points	
TOTAL POINTS:		805 points	
Exam 2 Exam 3/4 Exam 5/6 Final Exam Homework	Oct 2-8 Nov 3-8 Dec 4-8 TBA in Testing Center	100 points 100 points 100 points 200 points 205 points	