

**SYLLABUS---MATH 1100**  
**CALCULUS TECHNIQUES**  
**CRN# 20397**  
**SPRING SEMESTER, 2012**  
**Tu,Th 7:30 a.m.**

Instructor: Lynn R. Hunt

Credits: 3 Hours

Text: CALCULUS AND ITS APPLICATIONS.  
Bittinger/Ellenbogen 10th Edition

Office: NIB 152 652-7762

hunt\_L@dixie.edu

Hours: 10 – 12 M - Th

3 – 3:30 M-Th

**1. OBJECTIVES:** All classes in mathematics at Dixie College support the general education goal of the college, and will:

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

Upon successful completion of this course, the students 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 mode 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.
5. Understand Quantitative Analysis and how it applies to business. This is a technique that seeks to understand behavior by using complex mathematical modeling and by assigning a numerical value to variables to try to replicate reality mathematically.

(Prerequisite: Math 1050 or 1090. Also required are basic skills on a graphing calculator.

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 ( Baako Wahabu) for eligibility determination. Proper documentation of impairment is required in order to receive services or accommodations. DRC is located in the North Plaza. Visit or call 652-7516 to schedule appointment to discuss the process. DRC Coordinator determines eligibility for and authorizes the provision of services.

**2. CALCULATORS:** A graphing calculator is required. The TI-83/84 will be used in class. Instruction can also be given on the TI-85, TI-86, TI-89 and TI-92.

**3. EXAMINATIONS:** Each student is expected to take the examinations as scheduled in the syllabus. Make-up exams will be given at the discretion of the instructor, and only if prior arrangements have been made. A final comprehensive exam will be given at the end of the term.

**4. ATTENDANCE:** Attendance is essential and roll will be taken. Tardiness will be frowned upon and may invoke the ire of the instructor.

**5. ASSIGNMENTS:** Homework assignments are to be done each day, but will only be collected on the day of the test. Put all homework together, fold in half lengthwise, and at the top include: (for example)

John Doe  
Math 1100, 7:30  
Ch. 1  
ALL - ?

**6. HELP:** I am available for help during posted office hours, and other times by appointment. There are also tutors available in the Browning building.

**7. SEMESTER SCHEDULE:** <http://new.dixie.edu/reg/?page=spring2012>

**8. GRADES:** Grades will be based on the ratio of the number of points earned by the student to the total number of points possible on all assignments and examinations. Grades will be sent to your Dmail address after each test. Grades will be assigned as follows:

<b>A</b>	100 – 94%	<b>B</b>	86 – 83%	<b>C</b>	74 – 70%	<b>D</b>	59 – 55%
<b>A-</b>	93 – 90%	<b>B-</b>	82 – 80%	<b>C-</b>	69 – 65%	<b>D-</b>	54 – 50%
<b>B+</b>	89 – 87%	<b>C+</b>	79 – 75%	<b>D+</b>	64 – 60%	<b>F</b>	49 – 0%

**20397 ASSIGNMENT SCHEDULE (M-1100,S12.30.Tu,Th) 20397**

JAN 10	CH. R p. 85: 1-48 ALL, X 20-23,32, 38,39,41,42,46	Th 8	3.1 EOO 13-45,75,76,81,83,85
Th 12	CH. R p. 85: 49-57 ALL	M-F 12-16	NO SCHOOL
Tu 17	1.1 ODDS-61,65,73,75,85,87	Tu 20	3.2 EOO-69,75,79,81,85
	1.2 EOO-53,55	Th 22	3.3 EOO-29,18,19,41
Th 19	1.3 EOO-29,35,43		3.4 EOO-21,24
	1.4 EOO-25,19,23	Tu 27	3.5 EOO-21,37,41
Tu 24	REVIEW		4.1 EOO-41,47,51,55,59,60
<b>Tu-Tu 27-31</b>	<b>TEST CHS. R - 1.4 (CENTER)</b>	Th 29	4.3 EOO-37,49,59,61,63,73,77
Th 26	1.5 EOO-77,55,85,89	APR 3	4.4 1,3,5,11,15,17,18,19,20,23, 25,31,35,39,41,49,51
Tu 31	1.6 EOO-45,97,99,101,103, 105,110		TEST CHS. 3-4 (TAKE HOME) DUE by Thursday the 12th
FEB 2	1.7 EOO-33,45,49,51,53,57,59, X 25	Th 5	5.1 1,5,9,13,21
	1.8 5,9,13,17,33,37,39,45,47,49,55	Tu 10	5.2 ODDS-41,23,27,31,35
Tu 7	2.1 1,9,21,69,71,75,79	Th 12	5.2 CONT. TAKE HOME TEST DUE
	2.2 9,13,17,21,25,47,53,103,109	Tu 17	5.3 29,31,33,35
Th 9	2.2 CONT.		5.7 9,15,21,27,33
	2.4 1,5,21,29,57,97,103	Th 19	6.1 1,5,13,15
Tu 14	REVIEW		6.2 EOO-17,29,31,41,42
<b>Tu-W 14-22</b>	<b>TEST CHS. 1.5-2.4 (CENTER)</b>	Tu 24	6.3 TBA, FINAL REVIEW
Th 16	2.5 EOO-41,31,39,50	Th 26	FINAL REVIEW
Tu 21	2.5 CONT.	<b>MAY ???</b>	<b>FINAL EXAM (IN CLASS)</b> <b>CHS. 5 - 6 AND COMP.</b> <b>7:00 am</b>
Th 23	2.6 EOO-33,20,49, X25		
Tu 28	2.7 EOO-25,27,33,37,38m		
MAR 1	Finish 2.7		
Tu 6	REVIEW		
<b>Tu-Tu 6-20</b>	<b>TEST CH. 2.5-2.7 (CENTER)</b>		