Spring 2012		MAC 2233 – Business Calculus - 21800			
Instructor: Email:	R. Jose Garcia rgarci12@mail.valenciacollege.edu				
Office:					
	4-219				
Phone:	407-582-1056				
Office Hours:	M/W	7:30am - 7:50am, 9:00am - 9:50am, 11:30am - 12:00pm			
	T/R	7:30am - 8:20am, 10:00am - 11:20am			
	F	9:00am - 10:00am (available by email)			
Website:	http://faculty.valenciacollege.edu/rgarci12/				

# **Course Description**

This class is an introduction to calculus with applications to business and social science. Topics include differentiation and integration of algebraic, exponential, and logarithmic functions, rates of change, curve sketching, and applications of the derivative and integration. A minimum grade of C is required if MAC 2233 is used to satisfy Gordon Rule and general education requirements. Prerequisite is College Algebra or equivalent.

**Syllabus** 

**Text:** <u>Applied Calculus</u>, 5<sup>th</sup> edition by Waner and Costenoble.

**Calculator:** TI-83/TI-84 or other graphing calculator is required for this course. You may use this calculator for all tests, however no sharing of calculators is allowed.

## Tests

There will be four in-class tests. If you miss a test you will receive a zero score. No makeup test will be given.

For these four in-class tests, there is an OPTIONAL component. The OPTION is to turn in textbook problems (or complete a similar assignment available through the WebAssign online program) that will count as part of the test grade.

## **OPTION 1** – Take the in class test only.

**OPTION 2** – Take the in class test AND turn in selected textbook problems. Each is worth 100 points. Your overall test score will be weighted 70% for the in class part and 30% for the optional part, and rounded to the nearest whole number. For example, you score 80 on the in-class test (for Test 1) and 100 on the textbook problems. Then your Test 1 score = .70\*80 + .30\*100 = 86.

## Details regarding the optional textbook assignment:

1. 20 textbook problems will be selected from the material covered on the test. The selection will be announced via email prior to the review session.

2. Your work must be done in a neat and organized fashion. All work must be shown.

3. Your work must be your own. Any work judged by the instructor to be a reproduction from any source will receive a zero score.

4. These assignments are due on each test day (turned in prior to the start of each test). No late work will be accepted, for any reason.

5. Each problem will be graded on two criteria:

a. Completeness – Neat, organized work, as well as completion of each assigned problem – 2 points.
b. Correctness – Right answers – 3 points.

6. You may choose to do any or all of these optional assignments.

7. The optional assignment results will only be counted if they help your grade.

## **Final Exam**

There will be a mandatory, comprehensive Final Exam given on Thursday 4/26 from 10:00am to 12:30pm. Your Final Exam score can replace your lowest test score (meaning the Final Exam score counts twice, once for itself and once for the test score it replaces). This will be done only if it improves your grade. There is no optional textbook assignment for the Final.

# Grading

Tests and the Final Exam are worth 100 points each, for a total of 500 possible points. Your overall grade is determined by the percentage of points you earn out of this total. This percentage is computed in one of these two ways:

1. (T1 + T2 + T3 + T4 + EXAM)/5	or	2. (Sum of three highest test scores + 2*EXAM)/5
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The results will be rounded to the nearest whole number and you will be assigned a letter grade based on the higher of the two grades and this scale: 90-100 A, 80-89 B, 70-79 C, 60-69 D, below 60 F

## Homework

Textbook homework is not a direct part of your grade. However, test questions will be drawn from the assigned homework problems, so you will benefit by working these problems.

## Attendance

Attendance is also not a direct part of your grade, though I will monitor it. You are responsible for all information discussed during class, including changes that may occur to the syllabus.

## Withdrawal

The last day to withdraw with a grade of W is Friday 3/23. After this deadline, you will not be able to withdraw. You will not be automatically withdrawn for being absent.

#### Conduct

Students are expected to behave maturely, respectfully, and honestly. In order to maintain a suitable learning environment, disruptions to the class (arriving late, talking during class, cell phone ringing, etc.) may result in being asked to leave the room. This will also lead to a meeting with the Dean of Students to determine the possibility of being allowed to return for subsequent classes. Any instance of cheating will result in a zero score and possible further action according to VC policy.

#### Resources

If you have questions about anything, I will be happy to help before, during, or after class, during my office hours, or by appointment if necessary. Please do not hesitate to ask! There are also other resources available, including the Math Center in 7-240 (MTWR 8am – 8pm, F 8am – 7pm, Sat 11am – 4pm) and the Office for Students with Disabilities in SSB-102 (407 582 1523).

## Disclaimer

This syllabus and the related course schedule may be changed at the discretion of the instructor. Any changes will be announced in class.

# **Tentative Schedule**

T R	1/10 1/12		uction/Review 1-39	
			1-29	
т	1/17	1.3	1-85	
R	1/19	2.1	1-13, 19-27	
		2.2	1-11, 63-65, 83-87	
т	1/24		5-11, 19-25, 33-49	
		Reviev	v for Test 1	
R	1/26	<mark>TEST 1</mark>		
-	4 /20	2.4	1 20	
	-	3.1		
R	2/2	3.2	1-13	
т	2/7	3.3	1-75	
R	-		1-29	
I.	2,3	5.1	1 29	
т	2/14	3.5	1-29	
R	2/16	3.6	1-43	
	•	Review for Test 2		
R	2/23	<mark>TEST 2</mark>		
т	2/20	4.1	1 60	
1	2/20		1-09	
R	3/1		1-15	
n	5/1	4.5	1-09	
Spring Break 3/5 – 3/9				
т	3/13	4.4	1-45	
R	3/15		1-79	
т	3/20	5.1	1-31	
		Reviev	v for Test 3	
R	3/22	<mark>TEST 3</mark>		

Note: Withdrawal Deadline is Friday 3/23

т	3/27	5.2	1-27
R	3/29	5.3	1-15
т	4/3	5.4	1-19
R	4/5	5.6	1-5
	-		
т	4/10	6.1	1-51
R	4/12	6.2	1-43, 53-61
	-		
т	4/17	6.4	1-43
	-	Reviev	v for Test 4
R	4/19	TEST 4	
	•		
R	4/26	FINAL	EXAM 10:00am – 12:30pm
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