DE LA SALLE UNIVERSITY
College of Science
Department of Mathematics

CALCBIO – Calculus for Biologists
Prerequisite: TRIGBIO

Prerequisite to:

Instructor: _____
Consultation Hours: _____

Contact details: _____
Class Schedule and Room: _____

Course Description

This introductory course familiarizes the students with basic Calculus concepts such as limits, continuity, derivatives, and integrals, and some of their applications to the life sciences.

Learning Outcomes

Integration (10%)	Demonstrates integration of the concepts presented.	Demonstrates some integration of the concepts presented.	Demonstrates limited integration of the concepts presented.	Demonstrates no integration of the concepts presented.
Accuracy of Computations/ Solutions (15%)	Computations/solutions are correct and explained correctly .	Computations/solutions are correct but not explained well.	Computations/solutions have some errors.	Incorrect computations/ solutions

	II. DIFFERENTIATION
	2.1 Basic Rules of
	    Differentiation
	pp 165-166 #1 to 36,
	        41 to 52, 61, 62, 68,
	        70, 71 , 73 to 76
	2.2 Product Rule and
	    Quotient Rule
	pp 177-179 # 1 to 55,
	        60,63
	2.3 Chain Rule
	pp 189-190 # 1 to 54,
	        63 to 66, 71 to 73,
	        77, 78, 80
	2.4 Higher Order Derivative
	    p 213 #1 to 28
	2.5 Implicit Differentiation
	    and Related Rates
	pp 225-228 # 1 to 40,
	        50 to 65
	2.6 Differentials
	pp 235-236 # 1 to 18,
	        29 to 33
		Weeks 5-7	

Waner, Stefan, Costenoble,Steven R. (2007) *Applied Calculus,*. Belmont, CA : Thomson Brooks/Cole.

Online Resources

Free Calculus Tutorials and Problems Accessed October 11, 2012 from http://analyzemath.com/calculus/
Visual Calculus Accessed October 11, 2012 from http://archives.math.utk.edu/visual.calculus
   tutorial.math.lamar.edu
Dawkins, P. (2012) *Paul's Online Math Notes* Accessed October 11, 2012 from http://tutorial.math.lamar.edu

Class Policies

1. The required minimum number of quizzes for a 3-unit course is 3, and 4 for 4-