MASTER COURSE OUTLINE
Prepared By: Date: September 2017

COURSE TITLE
Business Calculus

GENERAL COURSE INFORMATION

Dept.: MATH&	Course Num: 148	(Formerly: MATH 163)
CIP Code: 27.0103	Intent Code: 11	Program Code:
Credits: 5		
Total Contact Hrs Per Qtr.: 55		
Lecture Hrs: 55	Lab Hrs: 0	Other Hrs: 0

Distribution Designation: Math Science MS, Symbolic or Quantitative Reasoning SQR

COURSE DESCRIPTION (as it will appear in the catalog)
This is an introductory calculus course for business and economics students. It includes an introduction to rates of change, differentiation, integration, areas, and appropriate calculus techniques. There are also applications to marginal analysis in economics, optimization and other relevant applications.

PREREQUISITES
MATH& 141, placement in the class or instructor permission

TEXTBOOK GUIDELINES
Appropriate college level text as chosen by instructor.

COURSE LEARNING OUTCOMES
Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills:
1. Work with functions and limits to model change
2. Apply appropriate methodology to differentiate and integrate elementary functions
3. Apply calculus techniques to problems in business and economics

INSTITUTIONAL OUTCOMES
IO2 Quantitative Reasoning: Students will be able to reason mathematically.

COURSE CONTENT OUTLINE
1. Review of function theory
2. Limits, rates of change, and the derivative
3. Applications of differentiation
4. Exponential and logarithmic functions
5. The integral
6. Techniques of integration
7. Applications of Integration
8. Functions in several variables

DEPARTMENTAL GUIDELINES *(optional)*

In order to give the instructor the greatest flexibility in assigning a grade for the course, grades will be based on various instruments at the instructor's discretion. However, to maintain instructional integrity there must be four class exams or three class exams and a project. A final exam will be given if there are less than four exams or a project may be substituted for the final exam if there are four in-class exams. At least 60% of the grade will be based on quantifiable work (exams, homework, quizzes, etc.). The remaining portion of the grade may be based on quantifiable work, attendance, projects, journal work, etc., at the instructor's discretion.

The following is a compilation of acceptable grading instruments: In class exams and a final, attendance, homework or quizzes, research paper, modeling projects on the calculator or computer. Other projects or assignments may be assigned as deemed appropriate at the instructor's discretion.

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DIVISION CHAIR APPROVAL **DATE**