Course Number: MATH 131   **Course Name**: Business Calculus I
Prerequisite: MATH 130 with a grade of "C" or higher, or permission of the Mathematics Department

COURSE DESCRIPTION
An introduction to differential calculus: limits, continuity, derivatives, rules for differentiation, derivatives of logarithmic and exponential functions, extrema, concavity and applied maxima and minima problems. Business applications are throughout. A TI83 or TI84 graphing calculator is required. Not open to students with credit for MATH 151. Meets general education requirement for the AA degree for a student planning to transfer to a business college at a fouryear university.

GOALS AND/OR OBJECTIVES
To introduce the student to differential calculus with related business applications. Emphasis is on problem solving and computation rather than mathematical theory.

TEXTBOOK: SPECIAL COURSE REQUIREMENTS
Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences, 13 th ed.
E. F. Haeussler, Jr., R. S. Paul and R. Wood, Prentice-Hall, 2009.
A Texas Instruments **TI-83** or **TI-84** graphing calculator is **REQUIRED**.

INSTRUCTIONAL METHODS
Lecture, discussion, demonstration and collaborative work.
To achieve a high degree of mastery of the course material, the Mathematics Department, in accordance with the Ohio Board of Regents standard, recommends that the student average 2 hours of study for each hour of class time.

UNITS OF INSTRUCTION
Chapters 5.3, 10.1 – 10.4; 11.1 – 11.5; 12.1, 12.2, 12.4, 12.5, 12.7; 13.1 – 13.6