

Course Number: MATH 132

Course Name: Business Calculus II

Prerequisite: MATH 131 with a grade of "C" or higher, or permission of the Mathematics Department

COURSE DESCRIPTION

An introduction to integral calculus and multivariable calculus: antiderivatives, definite integrals, area under a curve, Fundamental Theorem of Calculus, techniques of integration, differential equations, functions of several variables, partial derivatives, extrema of functions of two variables. Business applications are throughout. A TI83 or TI84 graphing calculator is required. Not open to students with credit for MATH 152. 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

This course introduces students to differential and integral calculus and related business applications. Emphasis is on problem solving and computation skills rather than mathematical theory.

TEXTBOOK: SPECIAL COURSE REQUIREMENTS

Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences, 13th ed.,
E. F. Haeussler, Jr., R. S. Paul, and Richard Wood, PrenticeHall, 2009.

A Texas Instruments TI83 or TI84 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

Chapter 1: 1.5

Chapter 2: 2.8

Chapter 14: 14.1 – 14.10

Chapter 15: 15.1, 15.3 – 15.5, 15.7

Chapter 17: 17.1 – 17.4, 17.6, 17.7