

Course Number: MATH 130

Course Name: Mathematical Analysis for Business

Prerequisite: MATH 104 with a grade of "C" or higher, or placement by COMPASS

COURSE DESCRIPTION

A review of applications: equations, inequalities, and function notation. An introduction to graphs of functions: translation and reflection of graphs of functions. An introduction to modeling: linear, quadratic, exponential, and logarithmic functions. An introduction to matrices: Addition, subtraction, multiplication, row reduction and solving linear systems using row reduction. The mathematics of finance: compound interest, annuities, amortization and sinking funds. Business applications are throughout. A TI83 or TI84 graphing calculator is required. Not open to students with credit for MATH 148 or MATH 150. 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 provides a solid algebraic preparation for the student who plans further formal mathematics education in business calculus and, introduces the student to related business applications in the area of finance.

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 R. Wood, PrenticeHall, 2009.

A Texas Instruments TI 83 or TI84 graphing calculator is REQUIRED.

INSTRUCTIONAL METHODS

Lecture, discussion, demonstration, 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 1.1 – 1.3, 2.1, 2.2, 2.3, 2.7, 3.1 – 3.6, 4.1 – 4.4, 5.1, 5.2, 5.4, 5.5, 6.1 – 6.4