MATH 151 – Calculus for management – SYLLABUS

Department of Mathematics
Millersville University

Description

Elementary calculus and its applications in business, economics, life and social sciences.

problems. Improper integrals. No credit toward a major or minor in mathematics. (4 credits)

This course may be taken for general education credit (G2)

Prerequisites

C- or better in MATH 01 or math placement testing/evaluation before registration

Course Objectives

Students will become proficient in applying the techniques of calculus to problem solving situations. By the conclusion of this course the successful student will be able to:

- evaluate limits algebraically, graphically and numerically,
- solve problems involving the derivative, its definition, its relationship to limits, and its application to finding slopes of curves and rates of change,
- solve problems involving the fundamental formulas and techniques of differential calculus,
- solve problems involving the indefinite integral including problems requiring u-substitution and integration by parts
- solve problems involving the definite integral, its relationship to limits, and its application to finding areas,
- solve problems involving differentiating and integrating functions including polynomial, rational, exponential and logarithmic functions,
- solve problems involving the development of applications of the theoretical underpinnings of calculus,
- demonstrate understanding of the notions of limits and continuity, some of the key formulas of calculus, and of some major theorems of calculus.

Assessment

Assessment of student achievement of the course objectives will vary from one instructor to another. Typical assessment will be made through work in class, homework, and examinations.

Use of Technology

- u-substitution
- Integrationby parts

Definite Integrals
Fundamental theorem of calculus
Area
Applications

Recently Used Textbooks

, Tenth Edition by Larson, Cengage Learning, 2017