

**CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCE  
MATH 1930**

Page 1 of 2

**1.0 Course Objectives**

- 1.1 Overview of Content and Purpose:** (3 hours) basic ideas of calculus are surveyed with applications; functions, limits, derivatives, integrals, partial derivatives. Trigonometry is not required. May not be used as a prerequisite for MATH 1960. Credit will not be granted for both MATH 1930 and MATH 1950.
- 1.2 For whom Intended:** This course is geared for non-physical science majors. All of the basic ideas of calculus are developed and applied to a variety of concrete problems. However, the level of technical sophistication is less than in the traditional three semester calculus sequence.
- 1.3 Prerequisite:** 4 years of high school mathematics (not including trigonometry) or equivalent, and satisfactory score on the Calculus Readiness Exam, or MATH 1320 with a grade of C- or better.

**2.0 Objectives**

- 2.1 Performance Objectives for The students:** All of the basic ideas of calculus are developed and applied to a variety of concrete problems. However, the level of technical sophistication is less than in the traditional three semester calculus sequence..

**3.0 Content and Organization**

- 3.1 Topics**
- 1) Functions and limits
  - 2) Differentiation
  - 3) Applications of Differentiation
  - 4) Integration
  - 5) Exponential and logarithmic functions
  - 6) Applications of Integration
  - 7) Multivariable Calculus

**4.0 Teaching Methodology**

- 4.1 Methods To be Used:** The course will be conducted primarily by lecture and discussion.

**5.0 Evaluation**

- 5.1 Basis for Evaluating Student Performance:** Evaluation will be based primarily on written examinations but (possibly) also on homework assignments.

**CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCE  
MATH 1930**

Page 2 of 2

**6.0 Resource Material**

- 6.1 Textbook(s) Or other Required Reading:** Lial, Calculus with Applications, Brief version, Addison Wesley Publishers .
- 6.2 Current Bibliography of Resources:** Larson, R.E., and Hostler, R.P., *Brief Calculus with Applications*, D.C. Heath, 1987, second edition.
- Harshbarger, R.J., and Reynolds, J.J., *Applied Calculus for Management , Life, and Social Sciences*, D.C. Heath, 1989, third edition.