

DOUGLAS COLLEGE

Course Information

Page 1 of 2

A. Division ACADEMIC

Date November 14, 1990

~~NEW COURSE~~ New Course

B. Department SCIENCE

Revision of Course MAP 250

eer

to be Purchased by Students:

N. Textbook and Materials

Business, Economics, Life  
Wiley Publishing Company

Barnett & Ziegler, Applied Mathematics For Business,  
Sciences, and Social Sciences, 3rd Edition, Dell

O. Course Objectives:

should be able to:

Upon completion of this course, the student s

ry limits; understand the basis of derivatives; be able to  
tives of algebraic and transcendental functions ( $\exp(x)$ ) and  
derivatives implicitly.

1. Compute elementary  
calculate derivat  
 $\ln(x)$ ; and find

functions by applying first and second derivative  
be able to locate the extrema of functions.

2. Sketch graphs of  
techniques; and

diminishing returns, and elasticity.

4. Understand the elements of the method of partial derivatives and solve simple two-  
variable problems to optimize demand and revenue functions.

P. Course content:

product, continuous, rate of change, derivative  
tangent lines; rules and techniques for differentiating;  
lysis.

definition;  
marginal ana

tive and graphs; second derivative; application to graphs  
rentials

2. First deriva  
optimization problems; curve sketching; differ

other applications to the mathematics

3. Derivative of exponential and logarithmic func  
related rates; elasticity of demand; o  
of finance.

1 derivatives; graphical meaning of  
problems in several variables

4. Functions of several variables; partial  
partial derivatives; maximum/minimum p