

**The University of Chicago**  
Graham School of General Studies

Pre-MBA Mathematics  
Course ID: MAMATH

## **Course Syllabus**

Spring 2011

Instructor Name: Ben Van Vliet

Office Location:	IIT Downtown Campus 565 W. Adams, Suite 655 Chicago, IL 60661
Office Hours:	1:00 am – 4:00 pm Mondays, Wednesdays
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Course Web Page:	None
Class Hours:	Tuesdays, 6:00-9:00 pm
Class Location:	Gleacher Center
Prerequisites:	None

### **A. Course Description**

This course presents algebra, matrix algebra and introductory calculus. Topics include equations, logarithms, analytic geometry, functions, matrices, differentiation and integration. Students will do problems in class to reinforce theory and examples presented during the lectures. Quizzes, homework and a written final exam are all optional.

### **B. Method of Instruction**

This course consists of 9 lectures in the areas of algebra and calculus. As some students will be taking this class for a grade, and some will be auditing, the eight projects and eight quizzes will be optional as is the final exam during the final class meeting. Late homework will be accepted. Missed quizzes may be made up with prior notice.

### **C. Course Objectives**

The objective of this course is to gain an understanding of:

- 1. Basic algebra and matrix mathematics.**
- 2. Integral and differential calculus.**
- 3. Logarithms.**
- 4. Basic applications of these topics as they relate to business mathematics.**

#### **D. Class Dates and Topics**

<b>Date</b>	<b>Topic</b>
Week 1	Algebraic Expressions
Week 2	Equations
Week 3	Logarithms
Week 4	Functions
Week 5	Matrix Algebra
Week 6	Differential Calculus
Week 7	Differential Calculus Applications
Week 8	Integral Calculus
Week 9	Integral Calculus Applications
Week 10	Final Exam

#### **E. Textbook and Required Supplies**

Required: *Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences, 13<sup>th</sup> Edition*, by E.F. Haeussler, et al.

#### **F. Grades**

Should you choose to receive a grade, your final grade will be based on the total number of points earned in the course.

Weekly Projects	20 %
Weekly Quizzes	30 %
Final Exam	50 %

#### **G. Course Component Specifics**

All assignments should be turned in by Tuesday evening at 6:00 pm CST.

#### **H. Class Rules of Conduct**

The University of Chicago expects students to maintain the highest standards of academic integrity. No student may seek to gain an unfair advantage over another.

### Class Schedule of Assignments

<b>Class</b>	<b>Topic</b>	<b>Assignment</b>
Week 1	Algebraic Expressions	Project 1, due Week 2
Week 2	Equations	Quiz 1 in class Project 2, due Week 3
Week 3	Logarithms	Quiz 2 in class Project 3, due Week 4
Week 4	Functions	Quiz 3 in class Project 4, due Week 5
Week 5	Matrix Algebra	Quiz 4 in class Project 5, due Week 6
Week 6	Differential Calculus	Quiz 5 in class Project 6, due Week 7
Week 7	Differential Calculus Applications	Quiz 6 in class Project 7, due Week 8
Week 8	Integral Calculus	Quiz 7 in class Project 8, due Week 9
Week 9	Integral Calculus Applications	Quiz 8 in class Project 9, due Week 10
Week 10	Final Exam	