

DATE: Fall, 2008

COURSE NUMBER AND TITLE: MATH130 -Finite Mathematics

CREDIT HOURS: four

INSTRUCTOR: Dr. Micheal H. Vernon

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- **TEXTBOOK:** Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences, Eleventh Edition, Barnett, Ziegler, Byleen

PURPOSE:

Solve systems of linear equations and inequalities, use elementary matrix algebra, use techniques of linear programming, calculate elementary discrete probability and statistics. Emphasis on applications to business, economics and social sciences. Pre-requisite: A Grade of "C" or better in MATH 024 or MATH 025 or MTHPT 103 or satisfactory placement score

.COURSE OBJECTIVES:

Upon completion of this course, each student will be able to:

1. Solve linear equations and graph the solutions.
2. Evaluate functions and graph the results.
3. Solve systems of linear equations using matrices.
4. Solve linear inequalities, apply to linear programming.
5. Use the simplex method to solve a linear programming problem.
6. Understand the logic of set theory and counting elements of a set.
7. Understand and apply sum, difference, multiple angle and product sum formulas.
8. Calculate probabilities.
9. Understand Data Description and Probability Distributions.
10. Apply all the above to practical models in business, economics and social sciences.

NOTE: If you need course adaptations or accommodations because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please make an appointment as soon as possible.

METHODS OF INSTRUCTION:

The instructor will utilize an average of 200 minutes of interactive lecture/discussion per week. Homework will be assigned from each section covered. Students are encouraged to

form study groups to work on the homework and to prepare for quizzes and the final exam.

Grading Scale:

- A: 90% - 100%
- B: 80% - 89%
- C: 70% - 79%
- D: 60% - 69%

All assignments quizzes will be available in BlackBoard. Be sure to visit this site frequently during the semester.

METHODS OF EVALUATION:

The student will be evaluated based upon the results of 5 exams (100 points each), homework (500 points total), and a final exam worth 200 points and attendance (59). Grades will be assigned based upon a percentage of points earned out of the total possible (1259).

COURSE OUTLINE:

Chapter:	Title of Chapter
1	Linear Equations and Graphs
2	Functions and Graphs
3	Mathematics of Finance
4	Systems of Linear Equations: Matrices
5	Linear Inequalities and Linear Programming
6	Linear Programming: Simplex Method
7	Logic, Sets and Counting
8	Probability
9	Markov Chains
11	Data Description and Probability Distributions
	Final Exam - December 15, 2008 or December 16, 2008