Catalog Description:
Algebraic, exponential, and logarithmic functions. Matrix algebra. Applications to business.

Prerequisite:
Math Placement Level N; C- or better in 1075; or credit for 104; or ACT math score $\geq$ 22 or SAT math score $\geq$ 520 (scores must be less than 2 years old).

Exclusions:
Not open to students with credit for 1131 or for any math course numbered 1149 or higher, or a quarter-system math course numbered 150 or higher.

Purpose of Course:
Math 1130 is a pre-calculus course with a finance section slanted toward a business program. The applications are business related.

Follow-up Course:
Math 1131

Text:
Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences, 13th Edition; by Haeussler, Paul, and Wood; published by Pearson; ISBN 9780321732378

Topics List:

Ch. 1 Review of Algebra
0.7	Equations, In Particular Linear Equations.
0.8	Quadratic Equations.
1.2	Linear Inequalities.
1.3	Applications of Inequalities.
1.6	Sequences

Ch. 2 Functions
2.1	Functions.
2.2	Special functions.
2.3	Combinations of functions.
2.4	Inverse Functions.
2.5	Graphs of functions

Ch. 3 Linear and Quadratic Functions
    3.1   Lines
    3.2   Applications and Linear Functions.
    3.3   Quadratic Functions
    3.4   Systems of Linear Equations.
    3.6   Applications of Systems of Equations.

Ch. 4 Exponential and Logarithmic Functions
    4.1   Exponential Functions.
    4.2   Logarithmic functions.
    4.3   Properties of Logarithms.
    4.4   Logarithmic and Exponential Equations.

Ch. 5 Mathematics of Finance
    5.1   Compound Interest.
    5.2   Present Value.
    5.3   Interest Compounded Continuously.
    5.4   Annuities
    5.5   Amortization of Loans.

Ch. 6 Matrix Algebra
    6.1   Matrices.
    6.2   Matrix Addition and Scalar Multiplication.
    6.3   Matrix Multiplication.
    6.4   Solving Systems by Reducing Matrices.
    6.6   Inverses