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 ≥ 22 or SAT math score ≥ 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:

Topics List:
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

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

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

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.

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