



## MTH 131: Elements of College Mathematics

Topics for this course include linear, quadratic, exponential and logarithmic functions; break-even analysis; matrix algebra; simplex method of linear programming; and the mathematics of finance. Prerequisite: Introductory Algebra Competency. Three lecture hours per week. Gen. Ed. Competencies Met: Quantitative and Symbolic Reasoning.

### Course Student Learning Outcomes

1. Solve application problems for linear equations, specifically Supply and Demand and Break Even Analysis.
2. Solve systems of Linear Equations using matrices.
3. Determine the solution of a linear programming problem using both graphical method and the simplex method.
4. Demonstrate knowledge of financial mathematics that includes determining which formula to use, using the formula correctly, and understanding the answer.
5. Demonstrate knowledge of linear, polynomial, rational, exponential, and logarithmic functions.

**Credits:** 3

**Program:** Mathematics