

COCONINO COMMUNITY COLLEGE
COURSE OUTLINE

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Status: Permanent
Effective Term: Fall 2017

December 4, 1991
Spring 2011
February 3, 2017

A. Identification:

1. Subject Area: Math (MAT)
2. Course Number: 172
3. Course Title: Finite Mathematics
4. Credit Hours: 3
5. Course Description: Various analytical methods used in business and social sciences, including algebra review, functions and modeling, systems of linear equations, matrices, linear programming, mathematics of finance, probability, and combinations. Prerequisite: MAT 151 or placement. Three lecture. Fall, Spring.

- B. Course Goals: To build student confidence in the use fundamental principles and concepts of analysis in the area of finite mathematics and to develop problem solving skills. To develop a positive attitude toward mathematics and build skills in the listed areas.

C. Course Outcomes

Upon successful completion of this course, student will:

1. perform elementary matrix operations;
2. solve linear systems by elementary row operations;
3. solve linear programming problems by graphical and algebraic methods;
4. perform basic set operations;
5. evaluate probabilities of simple, compound, independent and dependent events;
6. calculate measures of central tendency and dispersion for a collection of statistical data;
7. apply the theories of normal and binomial probability distributions to statistical problems;
8. and solve various financial problems.

- D. Course Outcomes Assessment will include comprehensive final exam.

E. Course Content will include:

1. review of functions;
2. matrices;
3. systems of equations;
4. linear programming;
5. set theory;
6. counting techniques;
7. probability and statistics;
8. and finance problems.