

COCONINO COMMUNITY COLLEGE
COURSE OUTLINE

Revised by Maxie Inigo
Status: Permanent
Effective Term: Fall 2017

October 31, 2016

A. Identification:

1. Subject Area: Mathematics (MAT)
2. Course Number: 142
3. Course Title: College Mathematics
4. Credit Hours: 3
5. Course Description: Students will examine finance, growth, probability, statistics, and common applications encountered in society. General Education: Mathematics. Prerequisite: MAT 096 (preferred) or MAT 097 or placement beyond prerequisite. Three lecture. Fall, Spring.

B. Course Goals: To build student awareness and develop a positive attitude, understanding and confidence in the content areas listed. To provide the students with the skills necessary to apply mathematics to non-academic situations.

C. Course Outcomes

Upon successful completion of this course, student will:

1. solve applied financial problems;
2. understand the differences between linear, exponential, and logistic growth;
3. solve various types of growth problems;
4. utilize probability theory to solve applied probability problems;
5. understand the basic elements of the normal distribution;
6. create and interpret statistical graphs;
7. calculate and interpret numerical descriptive statistics;
8. and solve problems involving optional topics.

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

E. Course Content will include:

1. finance, growth, probability, statistics;
2. two of the following optional topics are required:
 - a. graph theory;
 - b. set theory and logic;
 - c. voting systems;
 - d. fair division;
 - e. and geometrical symmetry and the golden ratio.