

**ADAMS STATE COLLEGE EXTENDED STUDIES
MATH 104: FINITE MATHEMATICS**

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COURSE CREDIT: 3 Semester Hours

PREREQUISITES: MATH 101: Intermediate Algebra

REQUIRED TEXTBOOK:

To order textbooks or obtain information about book titles you may go to www.exstudies.adams.edu and click on the "ASC Bookstore" icon.

Use **Section Number: 618** to order books from Bookstore site.

Lial, M.L., Greenwell, R.N., & Ritchey, N.P.(2002). *Finite mathematics* (7th ed.). Oceanside, CA: Addison-Wesley Publishing. ISBN: 0-321-06714-2

COURSE DESCRIPTION: Topics covered include functions and their graphs, matrices, linear programming, probability, and descriptive statistics. Applications are studied from the areas of business, behavioral sciences, economics, and the social sciences. The computer will be used as a problem-solving tool in some cases.

The **goal** of this course is to improve and enhance the basic math skills of the student, specifically in the areas of graphs, matrices, probability and statistics. The **purpose** of the course is to provide a wider perspective of applied mathematics, how it works, and why and how it is utilized in the real world. This is imperative to the student no matter what the field of study and completes the mathematics requirement for several degree programs.

COURSE STANDARDS: The following are the standards for this course. Each standard can be attained or exceeded by successfully completing the reading assignments, completion of the lesson assignments, and completion of the exams. Each student's final grade will directly correlate to the level each of the course requirements are met.

Standard 1: Learn and understand Linear functions, graphs and related topics.

Standard 2: Learn and understand what matrices are, how they work, when they are utilized, and operations upon them.

Standard 3: Learn and understand matrix programming methods.

Standard 4: Learn and understand financial calculations, including interest, annuities, and present value. Be able to calculate all of the above using hand calculations or a spreadsheet.

Standard 5: Learn and understand probability and statistics including the aspects of basic probability.

Standard 6: Learn and understand statistics, including central tendency, variation, and normal distributions.

COURSE REQUIREMENTS: The course includes seven lessons; each lesson includes readings and exercises from the textbook. These assignments must be submitted to the instructor for grading. There are two exams; a proctored midterm exam and a proctored final exam.

GRADE DISTRIBUTION AND SCALE:

Written Homework	200 points
Midterm proctored exam (lessons 1-3)	200 points
Final proctored exam (lessons 4-6)	<u>200 points</u>
TOTAL POINTS:	600 points

SCALE:

A	540 - 600 points
B	480 - 539 points
C	420 - 479 points
D	360 - 419 points
F	< 360 points