

COCONINO COMMUNITY COLLEGE
COURSE OUTLINE

Prepared by: K. Kozak
Revised by: Philip Martinez
Revised by: Kathryn Kozak
Status: Permanent
Effective: Fall 2016

Spring 2011
January 7, 2015
August 24, 2016

A. Identification:

1. Subject Area: Math (MAT)
2. Course Number: 096
3. Course Title: Intermediate Mathematics
4. Credit Hours: 3
5. Course Description: Basic algebraic concepts, including rational expressions, functions and their graphs, radicals, quadratics, and logarithms/exponentials. Prerequisite: MAT 091 or placement beyond prerequisite. Three lecture.

B. Course Goals:

To build student confidence in the use algebraic skills to expand and reinforce concepts previously learned, to have students develop a positive attitude toward mathematics and to build algebraic skills in the listed areas.

C. Course Outcomes: Students will:

1. simplify rational expressions and solve rational equations;
2. graph radical, quadratic, exponential, logarithmic, and absolute value functions;
3. perform function evaluation and identify domain and range;
4. simplify radical expressions and solve radical equations;
5. solve quadratic equations the Zero-Product Property, completing the square, and the quadratic formula;
6. perform operations with functions including finding the inverse;
7. analyze exponential and logarithmic expressions and functions;
8. solve logarithmic and exponential equations;
9. and solve various application problems involving concepts taught in the course.

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

E. Course Content will include:

1. rational expressions and equations;
2. radical expressions and equations;
3. quadratic equations;
4. functions:
 - a. evaluating;
 - b. operations;
 - c. inverse;
 - d. exponential and logarithmic;
 - e. quadratic;
 - f. radical;
5. and applications.