

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

MATH 124 - Intermediate Algebra

5 Unit(s)

Prerequisite(s): Qualifying eligibility from the Algebra I Assessment Level IV or MATH 108

Recommended Prep: Reading Level IV

Transfer Status: NT

85 hours Lecture

This course is designed as an intensive study of algebraic concepts, operations, and their applications. The topics include polynomials, rational equations, exponents, first-and-second-degree equations and inequalities, functions, complex numbers, and logarithms. Calculators with logarithmic functions required.

II. COURSE CONTENT

A. General Goals

1. To strengthen and broaden algebraic skills that are needed for more demanding climates of future courses in mathematics, science, and other subjects.

B. Objectives

Upon successful completion of this course, the student will be able to:

1. Reinforce and demonstrate abstract thinking and mathematical reasoning.
2. Demonstrate additional algebraic skills to those developed in beginning algebra.
3. Apply algebraic techniques to everyday mathematical problems.

C. Unit Titles/Suggested Time Schedule

<u>Topics</u>	Lecture	<u>Hours</u>
1. Review of the basics		3.00
2. Equations and Inequalities in One Variable		7.00
3. Equations and Inequalities in Two Variables		8.00
4. Systems of Linear Equations		5.00
5. Exponents and Polynomials		10.00
6. Rational Expressions and Functions		11.00
7. Rational Exponents and Roots		10.00
8. Quadratic Functions		9.00
9. Exponential and Logarithmic Functions		9.00
10. Conic Sections		4.00
11. Exams, Review, and Optional Topics		9.00
Total Hours		85.00

III. METHODS OF INSTRUCTION

- A. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- B. Lecture/Discussion in class, lecture only in the telecourse
- C. Board Work
- D. Class Assignments (where appropriate)

IV. METHODS OF EVALUATION

- A. Quizzes
- B. Written Examinations
- C. Class Response in class, no class response evaluated in the telecourse
- D. Daily Homework Assignments, where the student will demonstrate problem-solving skills.

V. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

- A. McKeague. INTERMEDIATE ALGEBRA. 7th Edition. Thompson, Brooks/Cole, 2004.

Materials Other Than Textbooks:

- A. Calculators must have logarithmic functions

Created/Revised by: Lisa Duke

Date: 10/30/2006