## COURSE SYLLABUS

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<th><strong>Course Title:</strong></th>
<th>Bridge to College Algebra</th>
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<td><strong>Department:</strong></td>
<td>Mathematics</td>
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**Course Code:** MAT*110  
**Course Type:** D/L/X  
**Elective Type:** M/LAS/G

**Course Descriptors:** Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

**Prerequisites:**  
C- or better in MAT*137L

**Contact Hours:**  
- **Lecture:** 1  
- **Clinical:** 0  
- **Lab:** 0  
- **Studio:** 0  
- **Other:** 0  
- **TOTAL:** 1

**Credit Hours:**  
- **Developmental:** N  
- **Lecture:** 1  
- **Clinical:** 0  
- **Lab:** 0  
- **Studio:** 0  
- **Other:** 0  
- **TOTAL:** 1

**Class Maximum:**  
- **Semesters Offered:** Su/W

**Ability Based Education (ABE) Statement:**  
At Tunxis Community College students are assessed on the knowledge and skills they have learned. The faculty identified the General Education Abilities critical to students' success in their professional and personal lives. In every class, students are assessed on course abilities, sometimes program abilities, and, in most classes, at least one General Education Ability. Students will receive an evaluation of the degree to which they have demonstrated or not demonstrated that General Education Ability.

**Catalog Course Description:**  
This course is intended for students who passed MAT*137L and now need to take MAT*172 College Algebra. The course will focus on the algebraic manipulation of rational expressions and functions, and radical expressions and functions, and a review of factoring. We will also cover solving equations with radicals and rational expressions.
### Topic Outline:
List course content in outline format.

1. Factoring
2. Four operations on rational expressions, solving rational equations
3. Four operations on radical expressions, solving radical equations

### Outcomes:
Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.

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

#### Rational Functions and/or Expressions
1) Determine identifying characteristics of rational functions or expressions
2) Evaluate, simplify, and perform operations on rational functions or expressions
3) Solve rational equations algebraically and/or graphically

#### Radical Functions and/or Expressions
1) Evaluate, simplify, and perform operations on radical functions or expressions
2) Solve radical equations algebraically and/or graphically
3) Identify imaginary numbers

### Program:
(Numbering reflects Program Outcomes as they appear in the college catalog)

### General Education:
6. Quantitative Reasoning - Students will learn to recognize, understand, and use the quantitative elements they encounter in various aspects of their lives. Students will develop a habit of mind that uses quantitative skills to solve problems and make informed decisions.

**Demonstrates:** Interprets numerical information and applies sufficient laws of logic and mathematics to solve problems using numbers, symbols, graphs and/or descriptions.

**Does Not Demonstrate:** Misinterprets numerical information or insufficiently applies laws of logic and mathematics to solve problems using numbers, symbols, graphs and/or descriptions.

### Evaluation:
List how the above outcomes will be assessed.

Assessment will be based on the following criteria:
1. Homework
2. Quizzes and Tests

### Instructional Resources:
List library (e.g. books, journals, online resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.

**Required:** MyMathLab or other Learning Management System

**Desired:** Computer Lab (possibly)

### Textbook(s)
Current Intermediate Algebra Text used by Math department