# COURSE SYLLABUS

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Pre-Algebra-Number Sense/Geometry with College Study Skills Workshop</th>
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<tbody>
<tr>
<td>Department:</td>
<td>Mathematics/Science</td>
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<tr>
<td>Curriculum:</td>
<td>Mathematics</td>
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</table>

| Course Code:          | MAT*075W                                                              |
| Course Type:          | X                                                                    |

## Prerequisites:
Appropriate Placement Test Scores for MAT*075W (Transitional Program)

## Elective Type:
N/A

## Credit Hours:
6

### Developmental:
- yes

### Lecture:
4.5

### Clinical:
0

### Lab:
1.5

### Studio:
0

### Other:
0

### Total:
6

## Corequisites:
None

## Other Requirements:
none

## Class Maximum:
18

## Semesters Offered:
F/Sp

## Ability Based Education (ABE) Statement
Students in this course will gain prerequisite skills to prepare them for Ability Based Education. 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:
A course designed for those students who need reinforcement in college study skills and the basic skills of arithmetic and directed numbers. Mathematics topics included in the course are as follows: arithmetic of whole numbers, fractions, decimals and the negative counterparts of those sets of numbers; ratio, proportion and percent; measurement; introduction to the basic concepts of algebra. In order to prepare students for the rigors of college mathematics and work in other disciplines, specific college study skills are embedded in the course and practiced in class. Students discover their own learning styles and develop learning and study plans based on their educational goals and current lifestyles. Student will spend 4.5 hours in the classroom and 1.5 hours in a computer lab environment. **Prerequisite: Appropriate placement test score**
Math Specific Topics:
1. Four operations on whole numbers, order of operations evaluating expressions, solving equations, word problems
2. Four operations on integers, evaluating algebraic expressions, like terms, solving equations, word problems
3. Divisibility, factorization, simplifying, multiplying and dividing fractions, related equations, word problems
4. Least common multiples, adding and subtracting fractions, four operations on mixed numbers, two-step linear equations
5. Four operations on decimals, rounding, related equations, and word problems
6. Ratio and proportion
7. Measurement (perimeter, area)

College study skills topics are woven throughout the course and are embedded in the mathematics topics of the course.

8. Transition from High School to Tunxis
   - The college environment, policies and procedures
   - Student expectations for academic success in a math course
   - Professor-student relationships and classroom decorum
   - Resources (Library, Academic Support Services, Student Accessibility Services, Financial Aid, Counseling, Student Activities)

10. Goal Setting and Reflection
    - Short-term – cycle of academic goal setting and reflecting to continuously improve study habits and learning
    - Long term – academic and professional goals for the future

11. Study Strategies
    - Time Management
      - Work and personal responsibilities
      - School (Practice, study groups, support services)
    - Note-taking Skills
    - Test Taking Skills

12. Learning Strategies
    - Memory and concentration techniques
    - Learning Styles
    - Reading and understanding math texts and graphics
    - Verbalizing mathematical expressions and equations

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

Math Specific Outcomes:
1. perform the 4 basic operations (addition, subtraction, multiplication, division) accurately on whole numbers, integers, fractions and decimals
2. apply these skills to various types of relevant word problems
3. demonstrate an ability to evaluate simple algebraic expressions
4. solve basic linear equations using appropriate algebraic steps
College Study Skills Outcomes:
5. demonstrate an understanding of expectations of a college math course
6. explore and utilize campus resources
7. develop effective math study skills
8. demonstrate an understanding of individual learning style and develop learning strategies for mathematics
9. set and reflect on academic goals

**PROGRAM:** (Numbering reflects Program Outcomes as they appear in the college catalog)
N/A

**GENERAL EDUCATION:** (Numbering reflects General Education Outcomes as they appear in the college catalog)

The outcomes for this developmental course contribute to the foundation needed for eventual success in the following:

7. **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.
- Quizzes
- Tests
- Labs
- Teacher-generated classroom assessments and activities
- Departmental final exam

**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.

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<tr>
<th>Required</th>
<th>Computer Lab for 1.5 hours per week with sufficient seating and white board space.</th>
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<td>Math tutor for additional support during computer lab time.</td>
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**Textbook(s)**
Refer to current academic year printout.