COURSE SYLLABUS

Tunxis Community College

Education That Works For a Lifetime

Course Title:	PreAlgebra-Number Sense/Geometry	**Date submitted:**	Spring 2014 (AAC: 14-92)
Department:	Mathematics & Science		
Curriculum:	Mathematics		

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

Course Code: (eg. ACC 101)	MAT*075
Course Type:	L

A: Clinical B: Lab D: Distance Learning
I: Individual/Independent L: Lecture N: Internship
M: Seminar P: Practicum U: Studio
X: Combined Lecture/Lab Y: Combined Lecture/ Clinical/Lab Z: Combined Lecture/Studio

Elective Type:	N/A

AH: Art History E: English FA: Fine Arts FL: Foreign Language
G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math S: Science SS: Social Science

Credit Hours:	3
Developmental: (yes/no)	Yes
Contact Hours: Lecture:	3
Clinical:	0
Lab:	0
Studio	0
Other:	0
TOTAL:	3
Class Maximum:	27
Semesters Offered:	F/S/Su

Prerequisites:

Appropriate placement test score for PreAlgebra—Number Sense/ Geometry (MAT*075)

Corequisites:

None

Other Requirements:

None

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:

A course designed for those students who need reinforcement in the basic skills of arithmetic and directed numbers. 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. This course does not satisfy a mathematics elective in any program, nor do its credits count toward graduation.

Topical Outline: List course content in outline format.

1. Four operations on whole numbers, related linear equations, word problems, order of operations
2. Four operations on integers, algebraic expressions, like terms, related equations, word problems
3. Divisibility, factorization, 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, related equations, and word problems
6. Ratio and proportion

	7. Percent problems 8. Measurement (perimeter, area)
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: **COURSE:** 1. perform the 4 basic operations (addition, subtraction, multiplication, division) accurately on whole numbers, fractions, decimals and the negatives of those sets 2. solve proportions and use percent notation accurately 3. apply these skills to various types of relevant word problems 4. evaluate simple algebraic expressions 5. solve basic linear equations using appropriate algebraic steps
	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)* **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.	**Assessment will be based on the following criteria:** Quizzes Tests Teacher-generated classroom assessments Departmental final exam
Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.	**Required:** digital tutorial guides, classrooms with sufficient seating and board space **Desired:** None
Textbook(s)	Refer to current academic year printout.