Alexandria Technical and Community College

MATH 0429: Beginning Algebra

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 3
Lab Hours/Week: *.*
OJT Hours/Week: *.*

Prerequisites:
This course requires any of these seven prerequisites
ATCC Beginning Algebra
ATCC Algebra Bridge
ATCC Arithmetic
ATCC Mathematical Reasoning
ATCC Fund of Physics
Algebra College Level
ATCC Calculus-Level Placement

Corequisites: None
MnTC Goals: None

This course is for learners who want or need basic algebra preparation to enable them to enroll in Intermediate Algebra. The main goal of the course is to provide training and practice in fundamental algebraic techniques, such as combining algebraic expressions, solving linear equations, using linear equations to solve word problems, and factoring algebraic expressions. The learner must pass this course with a minimum grade of "C" to advance to Intermediate Algebra.

B. COURSE EFFECTIVE DATES: 05/18/2009 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Understanding how to add, subtract, multiply, and divided fractions.
2. Introduction to algebraic expressions by adding, subtracting, multiplying, and dividing single variable equations.
3. Understanding grouping symbols based on the order of operations.
4. Use of the Addition and Multiplication principles of equality.
5. Translating English phrases into algebraic expressions.
6. Solving word problems involving the value of money and percent(s).
7. Graphing functions on a rectangular coordinate system.
8. Writing linear equations by deriving the slope, \( x \), and \( y \) intercept.
9. Solving systems of linear equation in two and three variables.
10. Application problems using systems of equations.
12. Applying the rules for exponents to add, subtract, multiple, and divide polynomial functions.

D. LEARNING OUTCOMES (General)

1. The learner will add, subtract, multiply, and divide algebraic expressions.
2. The learner will solve linear equations stated explicitly or in word problem form.
3. The learner will factor algebraic expressions using a variety of techniques.
E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted