

COLLEGE PREPARATION, MATH SKILLS 1

Certificate of Completion

Program Code: 3P38527

This certificate program will prepare students to improve their foundational level mathematical skills in order to ensure a successful transition to credit-bearing math courses. The program has three required courses: College Prep Basic Math, College Prep Pre#Algebra, and College Prep Elementary Algebra. The noncredit Basic Math course will provide students with a review of the basic arithmetic skills and the foundational level mathematical skills necessary to solve math equations. Pre#Algebra is aimed at introducing students to the basic principles of algebra and provides students with the learning skills necessary to solve algebraic expressions, polynomials, ratio, and fractions. The Elementary Algebra course provides students with the mathematical skills needed to perform operations on polynomials, rational expressions, and radical expression, factor polynomials at a proficient level. All course contents reinforce the learning objectives covered in the required courses and ensure students have the skills to be successful in a credit-bearing math course.

Code	Title	Hours
Required Core Courses (216 Hours)		
ABED 110	College Prep - Basic Math	72
ABED 115	College Prep Pre-Algebra	72
ABED 116	College Prep Elementary Algebra	72
Total Hours		216

Plan of Study

First Year

Semester 1	Hours	Semester 2	Hours
ABED 110		72 ABED 115	72
		72	72

Second Year

Semester 1	Hours
ABED 116	72
	72

Total Hours 216

List of Courses

ABED 110 **72 Hours**

College Prep - Basic Math

Advisory: Basic computer navigation skills.

This noncredit course is intended for students who desire to build or strengthen foundational level mathematical skills such as the addition, subtraction, multiplication, and division of whole numbers, fractions, decimals, percents, and integers. These concepts are applied to ratios, exponents, measurements, proportions, statistics, metric conversions, and geometric shapes. In addition, these operations, along with basic number theory, are used to solve real world problems. All work will be done without a calculator. (*Apportionment*)

ABED 115 **72 Hours**

College Prep Pre-Algebra

Advisory: ABED 110 College Prep - Basic Math or completion of a comparable Basic Math course.

This noncredit course is a review of basic math skills and an introduction to the basic principles of algebra. Topics include: Integers and algebraic expressions; operations on integers, mixed numbers and decimals, ratio, fractions, proportion and percentages; introduction of polynomials; polynomials and properties of exponents; factoring polynomials; solving linear equations and linear inequalities; graphing linear equations; equation solving and informal geometry. (*Apportionment*)

ABED 116 **72 Hours**

College Prep Elementary Algebra

Advisory: Knowledge of basic math skills and pre-algebra and order of operations to solve problems involving integers, fractions, and decimals.

This noncredit course is an introduction to algebra. Topics include: basic operations of integers, fractions, mixed numbers and decimals, linear equations and inequalities, simplifying and evaluating expressions, solutions of linear equations, linear inequalities, systems of linear equations, graphing linear equations, exponents and polynomials, factoring polynomials, rational expressions, roots and radicals, and quadratic equations (*Apportionment*)