

COURSE OVERVIEW

Mathematics

Course Number: 429

Course Name: Algebra I

Content ID Code: MA

Course Description

This course uses and expects its user to use set notations throughout. Sign numbers used in conjunction with equations and inequalities are stressed. Much time is devoted to solution of equations and inequalities using axioms. Fundamental operations with fractions, square roots, radicals, special products, and graphing consume about one-third of the course time.

Credits:

Course Creation Date:

Local Course #:

Instructional Time

Minutes:

Periods per Cycle

Cycles:

Clock Hours:

Methods of Assessment

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> 3-D Projects | <input type="checkbox"/> Debates | <input type="checkbox"/> Plays | <input type="checkbox"/> Simulations |
| <input type="checkbox"/> Anecdotal Records | <input type="checkbox"/> Demonstrations | <input type="checkbox"/> Portfolios | <input type="checkbox"/> Speeches |
| <input type="checkbox"/> Benchmarks | <input type="checkbox"/> Diary/Journals | <input type="checkbox"/> Presentations | <input type="checkbox"/> Standardized Tests |
| <input type="checkbox"/> Chapter Tests | <input type="checkbox"/> Final Tests | <input type="checkbox"/> Projects | <input type="checkbox"/> Student Self Evaluation |
| <input type="checkbox"/> Checklists | <input type="checkbox"/> Group Work | <input type="checkbox"/> Publisher Tests | <input type="checkbox"/> Teacher Made Tests |
| <input type="checkbox"/> Class Participation | <input type="checkbox"/> Interviews | <input type="checkbox"/> Quizzes | <input type="checkbox"/> Visuals |
| <input type="checkbox"/> Computer Products | <input type="checkbox"/> Laboratory Experiences | <input type="checkbox"/> Research Projects | |
| <input type="checkbox"/> Conferences | <input type="checkbox"/> Observations | <input type="checkbox"/> Role Play | |
| <input type="checkbox"/> Criterion-referenced Tests | <input type="checkbox"/> Performance Tasks | <input type="checkbox"/> Rubrics | |

Possible Adaptations

- | | | | |
|---|--|---|--|
| <input type="checkbox"/> Large Print Books | <input type="checkbox"/> Hands on Activities | <input type="checkbox"/> Peer Tutors | <input type="checkbox"/> Independent Study |
| <input type="checkbox"/> Audio Taped Tests | <input type="checkbox"/> Individual Aide | <input type="checkbox"/> Word Banks | <input type="checkbox"/> Contracts |
| <input type="checkbox"/> Extended Time | <input type="checkbox"/> Manipulatives | <input type="checkbox"/> Visual Cues | <input type="checkbox"/> Mentorships |
| <input type="checkbox"/> Preferential Seating | <input type="checkbox"/> Flash Cards | <input type="checkbox"/> Key Words | <input type="checkbox"/> Telescoping |
| <input type="checkbox"/> Advanced Organizers | <input type="checkbox"/> A Notetaker | <input type="checkbox"/> Acceleration | |
| <input type="checkbox"/> Additional Practice | <input type="checkbox"/> Wait Time | <input type="checkbox"/> Tiered Assignments | |
| <input type="checkbox"/> Alternate Assessments | <input type="checkbox"/> Computation Aids | <input type="checkbox"/> Expansions | |
| <input type="checkbox"/> Visualize the Auditory | <input type="checkbox"/> Study Guide | <input type="checkbox"/> Learning Centers | |

COURSE OBJECTIVES

Algebra I

Total Objectives: 10

Course Objective #	Cognitive Level	Course Objective	Month
The student will			
429-001		The student will translate verbal expressions into mathematical expressions and use mathematical properties to evaluate expressions in preparation for solving algebraic equations.	
429-002		The student will add, subtract, multiply and divide real numbers (integers, rationals, irrationals) and use these numbers to write and solve equations and formulas.	
429-003		The student will solve equations using one or more operations and apply equations to the solving of various real-world problems.	
429-004		The student will create, solve, and use ratios and proportions to solve real-world problems.	
429-005		The student will solve inequalities using one or more operations and apply inequalities to the solving of various real-world problems.	
429-006		The student will add, subtract, multiply and divide monomials and polynomials in preparation for the solving of higher degree equations.	
429-007		The student will use the zero product property and various methods of factoring to solve quadratic equations.	
429-008		The student will represent relations and functions symbolically and graphically.	
429-009		The student will graph various forms of linear equations (point-slope, standard, and slope-intercept) to solve real-world problems and infer missing data.	
429-010		The student will add, subtract, multiply and divide rational expressions in order to solve rational equations.	