

MODESTO CITY SCHOOLS COURSE OUTLINE

Course Title	Algebra 1 OLL S1 Algebra 1 OLL S2
Course Number	OLL30111 OLL30112
Recommended Grade	<input type="checkbox"/> 7 <input type="checkbox"/> 8 <input checked="" type="checkbox"/> 9 <input checked="" type="checkbox"/> 10 <input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12
Duration	<input type="checkbox"/> Quarter <input checked="" type="checkbox"/> Semester
Credit	<input type="checkbox"/> 2.5 <input checked="" type="checkbox"/> 5 <input type="checkbox"/> 10
Repeatable for Credit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Required for Graduation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Meets Graduation Requirement	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
CALPADS Course Number	9249
CALPADS Course Name	Algebra I
Meets UC/CSU Requirements	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, which area? <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G
CTE Course	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
CTE Course Level	<input type="checkbox"/> Introduction <input type="checkbox"/> Concentrator <input type="checkbox"/> Capstone N/A
Part of a Course Pathway	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, which pathway?
Credential Requirements	
Replaces	N/A
Recommended Prerequisites	N/A
Aligned to Standards Date	
Content Delivery Method	<input type="checkbox"/> Instructor Led <input checked="" type="checkbox"/> Online Provider Modesto Virtual Academy
Other Information	
Board Approval Date	
Implementation Date	Fall 2020

Course Description:

Required Text(s): (Title, Publisher, Year):

Supplementary Materials(s):



Course Name: Algebra I v21

Course Credit: 1.0

Course Estimated Completion Time: 2 segments/ 32-36 weeks

Course Description: Algebra I is the foundation—the skills acquired in this course contain the basic knowledge needed for all future high school math courses. The material covered in this course is important, but everyone can do it. Anyone can have a good time solving the hundreds of real-world problems algebra can help answer. Each module in this course is presented in a step-by-step way right on the computer screen. Hands-on labs make the numbers, graphs, and equations more real. The content in this course is tied to real-world applications like sports, travel, business, and health. This course is designed to give students the skills and strategies to solve all kinds of mathematical problems. Students will also acquire the confidence needed to handle everything high school math has in store for them.

Prerequisites: Middle School Grade 7 Mathematics Advanced or Pre-Algebra

Honors Lessons: Yes

Course Profile (Includes Honors, if applicable)

Type of Assessment	Quantity	Location(s)
Teacher-graded	45	
Auto-graded	76	
Partial Auto-graded	9	
Discussion-Based (DBA)	9	1.09, 2.09, 3.10, 4.09, 5.10, 6.11, 7.11, 8.10, 9.09
Collaboration	4	
Project-based	7	3.03, 4.05, 5.03, 5.08, 6.06, 8.07, 9.07
Total Assessments	130	

Types of Assessments (Includes Honors, if applicable)

Type of Assessment	Available	Type of Assessment	Available
Multiple Choice	Yes	Essay	No
Worksheets	No	Collaborative	No
Web 2.0	No	Short Response	Yes
Project - Based	Yes	Labs	No
Self - Check	Yes	DBAs	Yes

Scope and Sequence

Segment 1

Module 01: Algebra Foundations

- Numerical Operations
- Algebraic Expressions
- Units and Graphs
- Descriptive Modeling and Accuracy
- Translations
- Algebraic Properties and Equations

Module 02: Equations and Inequalities

- One-Variable Equations
- Two-Variable Equations
- Absolute Value Equations
- Inequalities
- Compound Inequalities
- Literal Equations

Module 03: Linear Functions

- Relations and Functions
- Function Notation and Graphs
- Linear Functions
- Linear Models
- Writing Linear Functions
- Horizontal and Vertical Lines

Module 04: Exponential Functions

- Properties of Exponents
- Operations with Radicals
- Exponential Functions and Models
- Graphing Exponential Functions
- Sequences
- Exploring Linear and Exponential Growth

Module 05: Systems of Equations

- Solving Systems of Equations Graphically
- Solving Systems of Equations Algebraically
- Solving Systems of Equations Approximately
- Two-Variable Linear Inequalities
- Systems of Linear Inequalities

Segment 2

Module 06: Statistics

- Representing Data
- Comparing Data Sets
- Data Sets and Outliers
- Two-Way Frequency Tables
- Scatter Plots and Line of Best Fit
- Correlation and Causation

Module 07: Polynomials

- Introduction to Polynomials

- Addition and Subtraction of Polynomials
- Multiplication of Monomials
- Division of Monomials
- Multiplication of Polynomials
- Special Products
- Division of Polynomials
- Function Operations

Module 08: Factoring

- Greatest Common Factor
- Factoring By Grouping
- Factoring Trinomials
- Perfect Square Trinomials
- Difference of Perfect Squares
- Polynomial Functions

Module 09: Quadratic Functions

- Quadratic Models
- Quadratics and Completing the Square
- Quadratics and the Quadratic Formula
- Applications of Quadratic Functions
- Exploring Non-Linear Systems and Growth