

## **Course Title**

2-Year Algebra 1A

## **Description of Target Group**

This course is for students who have shown some proficiency in basic mathematic skills. Students enrolled in this course generally are unable to grasp algebraic concepts at a rapid pace and require greater maturation prior to progressing to the course in geometry.

## **Purpose**

The purpose of 2-year Algebra 1A is to allow students to complete algebra at a slower pace. It allows students to learn concepts on sets, variables, open sentences, and operations with the numbers of arithmetic, ratio, proportion, and percent, measurement, area, volume. Students also learn the relationship between "word" problems and open sentences, order symbols, and concepts. Some axioms are introduced. This is the first semester of a four semester course.

## **Standards of Expected Student Achievement**

Upon completion of this course, students will be able to successfully demonstrate the following skills:

1. Use set symbolism and concepts.
2. Increase arithmetic skills and apply these skills to ratio, proportion and percent problems.
3. Use measurement, area, and volume concepts and formulas (time permitting).
4. Convert elementary types of "word" problems to open sentences.
5. Solve simple linear equations and able to graph elementary order relations.
6. Perform operations on numbers of arithmetic-being able to factor, use prime numbers, and find least common multiple.

## **Instructional Materials**

Text and Supplementary Materials

Refer to: Secondary Adopted Texts and Approved Supplementary Books Used in the Santa Maria Joint Union High School District

## **Activities**

1. Individual work
2. Lectures
3. Class participation
4. Demonstrations
5. Audio-visual materials

6. Field trips
7. Small group activities
8. Outside resource people

### **Description of Target Group**

This course is a continuation beyond 2-year Algebra 1A. Students enrolled in this course are generally unable to grasp algebraic concepts at a rapid pace, and therefore, require greater maturation prior to progressing to the course in geometry.

### **Purpose**

The purpose of 2-year Algebra 1B is to allow students to complete algebra at a slower pace. Students will learn real numbers, including negatives. Skills of the real numbers are developed. Axioms are introduced, solving linear equations, and order relations developed. Rudimentary probability and statistics are introduced. This is the second semester of a four semester course.

### **Standards of Expected Student Achievement**

Upon completion of this course, students will be able to successfully demonstrate the following skills:

1. Show arithmetic competency with both positive and negative real numbers.
2. Solve and graph linear equations and order relations.
3. Graph functions and relations in a plane.
4. Develop the ability to solve simple probability and statistics problems (time permitting).

### **Instructional Materials**

Text and Supplementary Materials

Refer to: Secondary Adopted Texts and Approved Supplementary Books Used in the Santa Maria Joint Union High School District

### **Activities**

1. Individual work
2. Lectures
3. Class participation
4. Demonstrations
5. Audio-visual materials
6. Field trips
7. Small group activities
8. Outside resource people

## 2-Year Algebra 1B

### Description of Target Group

This course is a continuation beyond 2-year Algebra 1A. Students enrolled in this course are generally unable to grasp algebraic concepts at a rapid pace, and therefore, require greater maturation prior to progressing to the course in geometry.

### Purpose

The purpose of 2-year Algebra 1B is to allow students to compete algebra at a slower pace. Students will learn real numbers, including negatives. Skills of the real numbers are developed. Axioms are introduced, solving linear equations, and order relations developed. Rudimentary probability and statistics are introduced. This is the second semester of a four-semester course.

### Standards of Expected Student Achievement

Upon completion of this course, students will be able to successfully demonstrate the following skills:

1. Show arithmetic competency with both positive and negative real numbers.
2. Solve and graph linear equations and order relations.
3. Graph functions and relations in a plane.
4. Develop the ability to solve simple probability and statistics problems (time permitting).

### Instructional Materials

Text and Supplementary Materials

Refer to: Secondary Adopted Texts and Approved Supplementary Books Used in the Santa Maria Joint Union High School District

### Activities:

1. Individual work
2. Lectures
3. Class participation
4. Demonstrations
5. Audio-visual materials
6. Field trips
7. Small group activities
8. Outside resource people