



ISS Course Syllabus

Teacher: **Mr. Marcus**
Course Title: **Algebra 1**

Grade: **8**
HS Credit Value:

Course Objectives:

Each level listed on the under fold is an integral part of a complete and comprehensive Course in **Algebra 1**.

While each section has a specific theme, the students will continuously review and integrate previously mastered concepts.

The students will be given the opportunity to develop self-confidence while broadening their scope of appreciation for **Algebra 1**.

The Course Sequence is specially structured so that each month has a specific objective. Once these objectives are met and mastered, the students will be able to apply these acquired skills to problem solving in a wide range of applications as it prepare them for **Algebra 2**.

General Course Contents:

Throughout this course sequence, the students will learn the following concepts and their applications.

Whole Numbers

- . The set of whole numbers
- . Graphs
- . Operations with whole numbers
- . Applications with whole numbers

Numbers & Factors

- . Numbers and bases
- . Sets
- . Factors and multiples
- . Least common multiple

Rational Numbers

- . Proper & improper fraction
- . Mixed numbers
- . Decimal fractions
- . Percent

Fractions & Rounding

- . Common fraction addition
- . Common fraction subtractions
- . Decimal fractions
- . Rounding numbers

Fractions and Per cents

- . Multiplication of fractions
- . Division of fractions
- . Fraction as per cents
- Percent exercises

Statistics & Graphs

- . Statistical measures
- . Types of graphs
- . Simple probabilities
- . And -or statements

Integers

- . Basic concepts
- . Addition & subtraction
- . Multiplication & division
- . Expressions & sentences

Formulas & Geometry

- . Square roots
- . Perimeter, circumference & areas
- . Rectangular solids
- . Cylinder, cone & sphere

Fractions and Per cents

- . Variables in formulas
- . Addition and subtraction
- . Multiplication and division
- . Problem solving

Review

- . Whole number and fractions
- . Fraction and per cents
- . Statistics, graph and probability
- . Integers

Evaluation System:

- The students will be given formal end of term examinations.
- The students will be informally assessed in the following ways:
 - a. Weekly or by unit, informal teacher generated tests.
 - b. Daily, this includes class work, participation, and behavior.
 - c. Homework assignments

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|--------------------------|-------------|
| Examination | 30% |
| Graded Class Work | 25% |
| Home work | 20% |
| Participation | 15% |
| Behavior | 10% |
| Total | 100% |

Strategies and Instructional Methods

- Demonstrations
- Direct problem solving
- Note taking
- Review and practice
- Weekly quizzes

Resources/ Textbooks:

- **Algebra 1**; Prentice Hall Mathematics