



ISS Course Syllabus

Grade 7 (Pre-Algebra)	Grade 8 (Algebra 1)	Grade 9 (Algebra 1)
<p>September</p> <hr/> <p>Whole Numbers</p> <ul style="list-style-type: none"> . Numbers concepts . Addition . Subtraction . Application <p>October</p> <hr/> <p>Multiplication & Division</p> <ul style="list-style-type: none"> . Basic Factors . Procedures . Practice . Applications 	<p>Whole Numbers</p> <hr/> <ul style="list-style-type: none"> . The set of whole numbers . Graphs . Operations with whole numbers . Applications with whole numbers <hr/> <p>Numbers & Factors</p> <ul style="list-style-type: none"> . Numbers and bases . Sets . Factors and multiples . Least common multiple 	<p>Variables and Numbers</p> <hr/> <ul style="list-style-type: none"> . Variables . Distributive property . Definition of signed numbers . Signed numbers operation <hr/> <p>Solving Equations</p> <ul style="list-style-type: none"> . Sentences and formulas . Properties . Solving equations . Solving inequalities
<p>November</p> <hr/> <p>Geometry</p> <ul style="list-style-type: none"> . Segments, lines and angles . Triangles . Quadrilaterals . Circle and hexagons 	<hr/> <p>Rational Numbers</p> <ul style="list-style-type: none"> . Proper & improper fraction . Mixed numbers . Decimal fractions . Percent 	<hr/> <p>Problem Analysis</p> <ul style="list-style-type: none"> . Words and symbols . Simple verbal problems . Medium verbal problems . Challenging verbal problems
<p>December</p> <hr/> <p>Rational Numbers</p> <ul style="list-style-type: none"> . Common fractions . Improper fractions . Mixed numbers . Decimal fractions 	<hr/> <p>Fractions & Rounding</p> <ul style="list-style-type: none"> . Common fraction addition . Common fraction subtractions . Decimal fractions . Rounding numbers 	<hr/> <p>Polynomials</p> <ul style="list-style-type: none"> . Addition of polynomials . Subtraction of polynomials . Multiplication of polynomials . Division of polynomials

Grade 10 (Geometry) September <hr/> A Mathematical System <ul style="list-style-type: none"> . Point, lines, and planes . Definition . Geometric terms . Postulates and theorems 	Grade 11 (Algebra 2) <hr/> Set, Structures & Function <ul style="list-style-type: none"> . Properties & operation of sets . Axioms & applications . Relations & functions . Algebraic expression 	Grade 12 (Pre-Calculus) <hr/> Relations & Functions <ul style="list-style-type: none"> . Relations & functions . Rules of correspondence . Notations of functions . Types of functions
October <hr/> Proofs <ul style="list-style-type: none"> . Logic . Reasoning . Two column proof . Paragraph proof 	<hr/> Numbers & sentences <ul style="list-style-type: none"> . Orders and absolute values . Sums and products . Algebraic sentences . Number and motion problems 	<hr/> Special functions <ul style="list-style-type: none"> . Linear functions . Second-degree functions . Polynomial functions . Other functions
November <hr/> Congruency <ul style="list-style-type: none"> . Congruent triangles . Corresponding parts . Inequalities . Quadrilaterals 	<hr/> Polynomials <ul style="list-style-type: none"> . Multiplying polynomials . Factoring . Operation with polynomials . Variations 	<hr/> Trigonometric Functions <ul style="list-style-type: none"> . Definition . Evaluation of functions . Trigonometric tables . Special angles
December <hr/> Similar Polygons <ul style="list-style-type: none"> . Ratio and proportions . Definition and similarity . Similar polygons & triangles . Right triangle geometry 	<hr/> Radical Expressions <ul style="list-style-type: none"> . Multiplying & dividing fractions . Adding & subtracting fractions . Equations with fractions . Applications with fractions 	<hr/> Identities & Functions <ul style="list-style-type: none"> . Reciprocal relations . Pythagorean relations . Trigonometry identities . Sums & differences formulas