General Course Information

Prerequisite:	Grade 9 Mathematics, Academic
Department:	Mathematics
Assistant Curriculum Leader:	Mr. Muttiah
Extra Help:	Check with individual teacher.
Textbook and Replacement Cost:	Principles of Mathematics 10 – McGraw-Hill, $90
Material Required:	3-ring binder, calculator, ruler, pencil, graph paper

Course Description

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

http://www.edu.gov.on.ca/eng/curriculum/secondary/math910curr.pdf

Assessment and Evaluation

To promote student success, ongoing assessment and feedback will be given regularly to the students. A variety of assessment and evaluation strategies will be used in this course, including tests, quizzes, group work, and presentations. Expectations will be evaluated based on the provincial curriculum expectations and the achievement levels outlined in the ministry document.

Expectations are organized into four categories of knowledge and skills. The categories and their corresponding weighting is as follows:

Knowledge and Understanding	Up to 35%
Thinking	Up to 20%
Communication	Up to 15%
Application	Up to 30%

Each student's final mark will be in the form of a percentage grade based on their achievement in the 4 categories on the achievement chart. The breakdown of the final mark is as followed:

Term Evaluation	70%
Final Evaluation	30%

The final Evaluation will be completed during the final 6 weeks of the course and may include a variety of summative activities including an exam, a presentation, a seminar, or an essay or another writing assignment.

In addition to students' performance in the achievement categories, students will also be assessed on their performance in the following learning skills:

- Responsibility
- Organization
- Independent Work
- Collaboration
- Initiative
- Self-Regulation

For specific policies on assessment and evaluation, and academic honesty, please refer to *School Procedure*s in the student agenda.

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The course is organized into the following strands

Quadratic Functions
• Investigating the Basic Properties of Quadratic Relations
• Relating the Graph of $y = x^2$ and Its Transformations
• Solving Quadratic Equations
• Solving Problems Involving Quadratic Relations

Analytic Geometry
• Using Linear Systems to Solve Problems
• Solving Problems Involving Properties of Line Segments
• Using Analytic Geometry to Verify Geometric Properties

Trigonometry
• Investigating Similarity and Solving Problems Involving Similar Triangles
• Solving Problems Involving the Trigonometry of Right Triangles
• Solving Problems Involving the Trigonometry of Acute Triangles