



MPM1D

Principles of Mathematics Grade 9, Academic

General Course Information

Prerequisite:	n/a
Teacher:	416-396-6793 Ext 20458
Department:	Mathematics
Extra Help:	After In-Class time or an Online Tutorial planned with your teacher
Textbook and Replacement Cost:	n/a
Required Materials:	binder, paper, scientific calculator, ruler, pencil, eraser, graph paper

Course Description

This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

<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. The categories and their corresponding weighting is as follows:

Knowledge and Understanding	35%	Thinking	5%
Application	20%	Communication	10%

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 follows:

Term Evaluation	70%	Final Culminating activity	10%
-----------------	-----	----------------------------	-----

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 *Code of Conduct*.

The course is organized into the following strands:

<p>Number Sense and Algebra</p> <ul style="list-style-type: none"> • Operating with Exponents • Manipulating Expressions • Solving Equations 	<p>Geometry</p> <ul style="list-style-type: none"> • Investigating the Relationship Between an Equation and Its Graph • Investigating the Properties of Slope • Using the Properties of Linear Relations to Solve Problems
<p>Measurement and Geometry</p> <ul style="list-style-type: none"> • Investigating Optimal Values of Measurements • Solving Problems Involving Perimeter, Area, Surface Area, and Volume • Investigating an Geometric Relationships 	<p>Linear Relations</p> <ul style="list-style-type: none"> • Using Data Management to Investigate Relationships • Understanding Characteristics of Linear Relations • Connecting Various Representations of Linear Relations