



## Cawthra Park Secondary School Mathematics Department Principles of Mathematics, Grade 9 Academic Mathematics Course Overview

**COURSE CODE:** MPM1D  
**PREREQUISITE:** None

**DEPARTMENT HEAD:** L. Fernandes  
**CREDITS:** One

### GOALS OF THE MATHEMATICS PROGRAM

1. To develop and extend numeracy and algebraic skills.
2. To analyze and apply appropriate strategies to solve both familiar and unfamiliar problems.
3. Use appropriate mathematical conventions to effectively communicate solutions to problems.

### OVERVIEW

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.

### COURSE STRANDS

Number Sense and Algebra  
Analytic Geometry

Linear Relations  
Measurement and Geometry

### ASSESSMENT AND EVALUATION

Evaluation in this course takes many forms, and may be based on **products**, **conversations** and **observations**. A student's final mark is made of two parts: 70% is based on evaluation across the entire semester, and 30% is based on one or more components of a final evaluation, administered at or toward the end of the semester.

Teachers use their **professional judgment** to determine a final mark, based on the following four categories:

1. Knowledge and Understanding: Subject-specific content acquired in the course (knowledge), and the comprehension of its meaning and significance (understanding).
2. Application: The use of knowledge and skills to make connections within and between various contexts.
3. Thinking: The use of critical and creative thinking skills and/or processes.
4. Communication: The conveying of meaning through various forms.

Students' **learning skills** and **work habits**, including timely completion of homework and assignments, attendance and punctuality, collaborative work, and responsible student behaviour, will also be assessed on an ongoing basis.

### USE OF PERSONAL DIGITAL DEVICES

**With teacher approval**, devices may be used during class time for class-related work, time-management and planning, or other academic uses. Inappropriate use of devices may result in this courtesy being revoked. Teachers are free to set their own rules regarding the use of devices in class, and to change them at any time.

### ADDITIONAL INFORMATION

Cawthra Park can be a very busy place. Students should establish deadlines and assessment dates with their teachers in advance, when possible. Daily attendance is essential in mathematics, due to its cumulative nature. Plagiarism, including misrepresentation of original work, cheating, theft of evaluation instruments, use of unauthorized aids, and false representation of identity, will result in appropriate consequences. Please refer to the Student Handbook under the "About Us" section of the Cawthra Park website (<http://www.cawthrapark.com>) for more details on assessment and evaluation policies.