



**St. Joseph Secondary School  
Department of Mathematics  
Course Outline**

**Course Code:** MPM 1DP  
**Course Name:** **Principles of Mathematics:  
Advanced Placement Preparation  
(pre-AP)**  
**Level:** Grade 9

**Student Name:** \_\_\_\_\_

**Textbook #:** \_\_\_\_\_

**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. Students will engage in abstract extensions of core learning that will deepen their mathematical knowledge and enrich their understanding.

In addition to the content outlined in MPM1D1, the Pre-AP course will provide a range of enrichment opportunities that will serve as preparation for students wishing to write the international Advanced Placement exam. There may be a nominal cost for some additional resources. The Pre-AP and AP program is for students working at a high level four achievement. Pre-AP courses allow students to study subjects in greater depth and breadth.

**Overall Course Expectations:**

This curriculum integrates appropriate technologies, such as graphing calculators and SMART Boards, into the learning and doing of mathematics, while recognizing the continuing importance of students' mastering essential arithmetic and algebraic skills. As a result, students will be expected to use the equipment with respect, as it is an integral part of the curriculum.

Students are given sufficient notice of upcoming evaluations and assignments. As such, students should provide their teachers with sufficient notice for any valid absences. Together with their teacher, they can determine how best to deal with the missed course evaluation. Any evaluation or assignment missed due to truancy will be recorded as a mark of 0.

**Ontario Catholic School Graduate Expectations (Vision of the Learner):**

The graduate is expected to be:

1. A discerning believer
2. An effective communicator
3. A reflective, creative and holistic thinker
4. A self-directed, responsible, lifelong learner
5. A collaborative contributor
6. A caring family member
7. A responsible citizen

**Efforts will be made to meet the individual learning needs of students to promote student success with respect to meeting the expectations of this course.**

My signature below indicates that I have read the Course Outline, Student Responsibilities, the Assessment/Evaluation Policy and the Uniform Policy in the student agenda, and I am in agreement with their content.

**Parent/Guardian Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Student Name:** \_\_\_\_\_ **Student Signature:** \_\_\_\_\_

## Units of Study:

- *Unit 1* - Measurement & Optimization
- *Unit 2* - Algebra
- *Unit 3* - Solving Equations in One Variable
- *Unit 4* - Modeling with Graphs
- *Unit 5* - Analyzing Linear Relations
- *Unit 6* - Trends in Data
- *Unit 7* - Plane Geometry
- *Enrichment topics: integer exponent laws, factoring, solving linear systems, graphing and transforming quadratic equations and circles.*

The Culminating Performance Task (CPT) is the EQAO evaluation, which will be administered towards the end of the course and will be weighted at 10% of the final mark. The final exam will be weighted at 20% of the final mark.

## Resources:

The course will use a variety of resources which will be distributed to students during the first week of the course. The text and all other resources assigned to each student are the responsibility of the student.

*Resources for this course include: ipads, PEDs, TI-83+ or TI-84 calculators, SMART Board, Principles of Mathematics 9 textbook (McGraw-Hill), algebra tiles, EQAO practice booklet, individual student resources to complete projects.*

*Any damage incurred will result in payment for replacement:  
\$85 for text, \$195 for TI-83+ or TI-84*

## Evaluation Policies:

1. Student marks will be determined by evaluating process & product according to 4 categories (see below) & 4 levels of the Achievement Chart as found in the Ministry Policy document.

### Evaluation Structure:

Knowledge	30%
Application	30%
Communication	20%
Thinking	20% (Including enrichment activities, problem sets, math contests, unit tasks)

**Term Evaluations: 70% of the final mark**

**Final Evaluations: 30% of the final mark (20% Exam and 10% EQAO)**

2. Feedback will also be provided for student **learning skills:** Responsibility, Organization, Independent Work, Collaboration, Initiative and Self-Regulation are assessed apart from student achievement in the four categories outlined above and will conform to the coding:

**E – Excellent    G – Good    S – Satisfactory    N - Needs Improvement**

3. **Assignments** submitted after the due date established by the teacher will receive a penalty **in accordance with our Board Assessment & Evaluation Policy Document** as outlined in the agenda.
4. Should a student miss an evaluation due to a legitimate absence, **in accordance with our Board A&E Policy Document**, the student and teacher will make arrangements to address the missed evaluation in a timely manner. In the cases of **extended vacation** or **prolonged absence**, consultation with the appropriate administrator is required.
5. In the event that the student does not make up the missed evaluation(s), a zero may be assigned. If it is determined that the evaluation(s) has/have been missed as a result of a skip/truancy or has/have been plagiarized, a zero may be assigned.
6. For all other cases of absence and/or missed evaluations (including absence during the final examination period), please refer to our Board A&E Policy as outlined in the student agenda.

**May God bless your efforts this semester!**