



# St. Michael Catholic Secondary School

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Phone: 905-951-8935

*We believe that each one, created in the image and likeness of God, is called by name into the Dufferin-Peel community to realize the Ontario Catholic School Graduate Expectations to the fullest extent possible as we all journey from the early years to vocation.*

## COURSE OUTLINE

<b>Department:</b>	Mathematics	
<b>Course:</b>	Principles of Mathematics, Grade 9, Academic	
<b>Course Code:</b>	MPM1D1	
<b>Common Course Calendar</b>	<b>Course Description:</b>	
	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.	
<b>Ministry/ICE Curriculum Documents Strand</b>	<b>Catholic Graduate Expectation Indicators for each Strand</b>	
<b>Number Sense and Algebra</b> <ul style="list-style-type: none"> <li>Operating with Exponents</li> <li>Manipulating Expressions and Solving Equations</li> </ul> <b>Linear Relations</b> <ul style="list-style-type: none"> <li>Using Data Management to Investigate Relationships</li> <li>Understanding Characteristics of Linear Relations</li> <li>Connecting Various Representations of Linear Relations</li> </ul> <b>Analytic Geometry</b> <ul style="list-style-type: none"> <li>Investigating the Relationship Between the Equation of a Relation and the Shape of Its Graph</li> <li>Investigating the Properties of Slope</li> <li>Using the Properties of Linear Relations to Solve Problems</li> </ul> <b>Measurement and Geometry</b> <ul style="list-style-type: none"> <li>Investigating the Optimal Values of Measurements</li> <li>Solving Problems Involving Perimeter, Area, Surface Area, and Volume</li> <li>Investigating and Applying Geometric Relationships</li> </ul>	<b>A Discerning Believer Formed in the Catholic Faith Community who:</b> <ul style="list-style-type: none"> <li>Develops attitudes and values founded on Catholic social teaching and acts to promote social responsibility, human solidarity and the common good</li> </ul> <b>An Effective Communicator who:</b> <ul style="list-style-type: none"> <li>Listens actively and critically to understand and learn in light of gospel values</li> <li>Reads, understands and uses written materials effectively</li> <li>Presents information and ideas clearly and honestly and with sensitivity to others</li> </ul> <b>A Reflective and Creative Thinker who:</b> <ul style="list-style-type: none"> <li>Recognizes there is more grace in our world than sin and that hope is essential in facing all challenges</li> <li>Thinks reflectively and creatively to evaluate situations and solve problems</li> </ul> <b>A Self-directed, Responsible, Life Long Learner who:</b> <ul style="list-style-type: none"> <li>Applies effective communication, decision-making, problem-solving, time and resource management skills</li> </ul> <b>A Collaborative Contributor who:</b> <ul style="list-style-type: none"> <li>Works effectively as an interdependent team member</li> <li>Thinks critically about the meaning and purpose of work</li> <li>Respects the rights, responsibilities and contributions of self and others</li> <li>Exercises Christian leadership in the achievement of individual and group goals</li> </ul> <b>A Responsible Citizen who:</b> <ul style="list-style-type: none"> <li>Accepts accountability for one's own actions</li> <li>Contributes to the common good</li> </ul>	

## Assessment and Evaluation:

Category Weightings	Weight %
Knowledge/Understanding	30%
Application	30%
Thinking	20%
Communication	20%

Final Summative Assessments	Overall Weighting
Term Work	70%
EQAO Assessment	10%
Exam	20%

Learning Skills and Work Habits will also be assessed and reported on. For More information please refer to Growing Success pg.

11. <http://www.edu.gov.on.ca/eng/policyfunding/growsuccess.pdf>

## Resources and Supplies Needed

► **Textbook:** Principles of Mathematics 9. McGraw-Hill Ryerson. ISBN 007097319-9

**Please Note:** Students are assigned a textbook at the beginning of the year. Each student is responsible for his/her assigned textbook and must return the assigned textbook in good condition at the end of the year. Failure to do so will result in a payment of **\$120 cash, debit or credit card.**

► **EQAO Prepbook:** Cost to be determined if lost.

► **Scientific Calculator or NSpire CAS graphing calculator, Pencil, Eraser, Paper, Graph Paper, Binder**

Please Note: The Math Department suggests that you invest in a graphing calculator to use in and out of the classroom. Prices vary, depending on where you purchase your calculator, however, if you invest in the graphing calculator now it will carry you through high school and college/university. Graphing calculators are available for in-class use for those students who do not purchase their own. Graphing calculator use on tests is at the discretion of the teacher.

## Assessment and Evaluation Policy – additional details may be found in the student agenda book

### ► Student Absences

Regular attendance on the part of students is vital to the learning process. Teachers will not be able to measure the achievement of curriculum expectation of students who miss assessment and evaluation opportunities.

Type of Absence	Communication	Next Steps
Illness	The parent/guardian will contact the school as per the school's attendance policy indicating that he/she is aware of the missed evaluation.	On the day of his/her return, the student and teacher will make arrangements to address the missed evaluation in a timely manner.
Appointments	In advance, the student will advise the teacher of the upcoming absence which will be verified by the parent/guardian as per the school's attendance policy.	In advance, the student and teacher will make arrangements to make up the missed evaluation.
School-related	In advance, the student will advise the teacher of the upcoming school related absence.	In advance, the student and teacher will make arrangements to make up the missed evaluation.
Prolonged	The parent/guardian will advise the school of the prolonged absence as soon as possible.	In advance, where possible, the student and teacher, in consultation with the administrator, will make arrangements to address the missed evaluations.

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 or truancy, a zero may be assigned.

The parent/guardian and student should review the student handbook for absences related to the 30% final and for any additional information.

### ► Submission of Assignments

Timelines for submission of assignments are established to encourage students to manage their time and to take responsibility for their learning. Timelines are also established to allow teachers to effectively deliver curriculum, support students, and manage the evaluation of assignments. It is important, therefore, that students work towards completing all assignments.

Due Date	Late Submissions	Closure Date
A due date is set by the teacher.	Once the due date has passed, a maximum 10% mark deduction may be used.	Once the closure date has passed, a zero may be recorded for assignments not submitted.
	The Learning skills section of the report card will reflect observations regarding late and missed assignments.	

### ► Homework Policy

Homework is assigned on a daily basis. Students and parents should expect a maximum of 20 minutes of homework a night.

Student success in math requires an ongoing review and practice of material. Extra help is available - ask your teacher how you can receive extra help.

**Please feel free to contact the teacher at 905-951-8935**

I have read the above information:

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Parent / Guardian Signature