



**COURSE OUTLINE 2019-2020**

<b>Course Name:</b>	<b>Foundations of Mathematics Grade 9</b>	<b>Course Code:</b>	<b>MFM 1P</b>
<b>Course Type:</b>	<b>Grade 9 Applied</b>	<b>Credit Value:</b>	<b>1.0</b>
<b>Teachers(s):</b>	<b>Mr. Pursch/Mr. Gilbert</b>		

<b>Course Description:</b>
<p>This course enables students to develop an understanding of mathematical concepts related to introductory algebra, proportional reasoning, and measurement and geometry through investigation, the effective use of technology, and hands-on activities. Students will investigate real-life examples to develop various representations of linear relations, and will determine the connections between the representations. They will also explore certain relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.</p> <p><a href="http://www.edu.gov.on.ca/eng/curriculum/secondary/math910curr.pdf">http://www.edu.gov.on.ca/eng/curriculum/secondary/math910curr.pdf</a></p>

<b>Course Overall Expectations:</b>	
<b>Strand</b>	<b>Overall Expectations</b>
<b>Number Sense and Algebra</b>	solve problems involving proportional reasoning;
	simplify numerical and polynomial expressions in one variable, and solve simple first-degree equations.
<b>Linear Relationships</b>	apply data-management techniques to investigate relationships between two variables;
	determine the characteristics of linear relations;
	demonstrate an understanding of constant rate of change and its connection to linear relations;
	connect various representations of a linear relation, and solve problems using the representations.
<b>Measurement and Geometry</b>	determine, through investigation, the optimal values of various measurements of rectangles;
	solve problems involving the measurements of two-dimensional shapes and the volumes of three-dimensional figures;
	determine, through investigation facilitated by dynamic geometry software, geometric properties and relationships involving two-dimensional shapes, and apply the results to solving problems.

### Assessment and Evaluation Strategies:

The purpose of assessment and evaluation is to improve student learning. Assessment and evaluation is based on the provincial curriculum expectations and the achievement levels outlined in the curriculum document. In order to ensure that assessment and evaluation are valid and reliable, and that they lead to the improvement of student learning, teachers use a variety of strategies throughout the course, including: providing students with feedback about their work (known as assessment for learning), helping to set learning goals and monitor their own progress (known as assessment as learning), and evaluation and reporting of progress in the form of grades and marks (known as assessment of learning).

<b>Unit Overview</b>	<b>Assessment and Evaluation Methods (May include major evaluations)</b>
<b>Introductory Unit</b>	<b>quizzes, performance tasks, assignments, projects, portfolio, journals, unit tests</b>
<b>Proportional Reasoning</b>	
<b>Linear Relations</b>	
<b>Algebra</b>	
<b>Connecting Linear Relations to Algebra</b>	
<b>Measurement Relationships</b>	
<b>Plane Geometry</b>	
<b>Course Culminating Activity – by strand</b>	
<b>Midterm and Final Exam</b>	<b>January Midterm May Final</b>

### Assessment and Evaluation Categories and Weights:

<b>Achievement Chart Categories</b>	
<b>Achievement Category Percentage</b>	<b>Percentage</b>
Knowledge/Understanding	35
Thinking/Inquiry	15
Communication	15
Application	35

<b>Evaluation/Weight of Marks</b>	
<b>Evaluation</b>	<b>Percentage</b>
<b>Term Evaluation</b>	70
<b>Final Evaluation</b>	
• EQAO	10
• Exam	10, 10

## **Learning Skills and Work Habits Assessment:**

The development of learning skills and work habits is an integral part of student learning. These skills are:

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

Learning skills and work habits influence student achievement and are included as a formal part of the assessment and evaluation process. Learning skills and work habits will be assessed through a variety of teacher strategies. (e.g. observation, student /teacher conference, self-reflection, checklists, exit cards, etc.) These important learning skills and work habits will be formally reported on the Provincial Report Card according to the following scale: E- Excellent, G- Good, S- Satisfactory, N- Needs Improvement.

## **Academic Dishonesty - Cheating and Plagiarism:**

Learning tasks that students complete as well as the assignments, tests and exams that students submit for evaluation must be their own work. Cheating and plagiarism is a serious offence that will not be condoned. Academic consequences will result.

## **Test Policy**

According to the Growing Success Document (2010) a student MUST fulfill his/her responsibilities and commitments within the learning environment, including completing all types of assessments according to agreed-upon timelines.

It is the math department expectation that all students will write tests on the date set out by the classroom teacher. In the event of an illness, emergency, or other significant situation, an exception can be made, provided sufficient documentation is given to the classroom teacher. Please note that parental approval is not a legitimate reason for missing an evaluation. If an acceptable absence is known prior to the assessment date, alternate arrangements must be made with the classroom teacher in advance.

If this expectation is not met, the evaluation will be completed but may not contribute to the student's course marks.

## **Late and Missed Assignments - Student Roles and Responsibilities**

Students are expected to:

- be responsible for providing evidence of their achievement of the overall expectations within the time frame specified by the teacher, and in a form approved by the teacher;
- understand that there will be consequences for not completing assignments for evaluation and/or for submitting those assignments late;
- use class time productively;
- in extenuating circumstances, request an extension from the teacher before the due date.

**Mark deductions for late and missed assignments may apply to major assignments only.**

**References:** *TVDSB Assessment & Evaluation Policy*, September 2011;  
*Growing Success - Assessment and Evaluation, and Reporting in Ontario Schools*, 2010.  
*Student Planner and School Web site*