**Course Outline MFM 1P1/P8/1P9**

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| **Teacher** | R. Singh |
| **Course** | Grade 9 Applied Mathematics |
| **Grade** | 9  |
| **Course Code** | MFM1P |
| **Curriculum** | The Ontario Curriculum Grades 9 and 10 |
| **Credit Value** | 1.0 |
| **Prerequisite** | None |
| **Textbook and Reference Materials** | NONE |

**Course Description:**

The Grade 9 Applied course is built to foster an environment and promote student success at the highest level. Our lessons are built using a three part framework(Minds On, Action and Consolidation). The effect of structuring our lessons this way results in a culture of learning that allows students to experiment, explore, inquire and work collaboratively. Through the definition of learning goals and success criteria, the learning environment is vibrant, engaging and probing. Learning is supported through hands on activities, group work and demonstrations to actively bring the curriculum to life.

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| **Teaching Strategies** | **Accommodations** |
| * Integrate technological tools and software where appropriate
* Use a balance of whole-class, small groups and individual instruction through student-centred and teacher directed activities
* Use a variety of instructional methods to address a variety of learning styles (self-discovery hands-on activities, teacher instruction, peer instruction)
* Provide extra help for students who may require one on one contact
 | * Extra time for tests, quizzes, exams and assignments
* Flexibility for handing in assignments due to school related activities
* Consideration of individual learning styles
* IEP specific accommodations
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**Assessment and Evaluation.**

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| **Category** | **Weight** |
| **Knowledge & Understanding** – *Subject-specific content acquired in each course (knowledge) and the comprehension of its meaning and significance (understanding)** Evaluation in this category may include but is not limited to quizzes, tests, in-class question and answer, group work, presentation, problem assignment etc.
 | 50% |
| **Application** – *The use of knowledge and skills to make connections within and between various contexts** Evaluation in this category may include but is not limited to tests, in-class problems, take-home project, etc.
 | 20% |
| **Thinking** – *The use of critical and creative thinking skills and/or processes** Evaluation in this category will derive primarily from in-class “TIPS” assignments but may include, critical analysis questions, extended answer problems etc. which may or may not be part of a test.
 | 20% |
| **Communication** – *The conveying of meaning through various forms** Evaluation in this category may include but is not limited to the proper use of mathematical symbols and terminology, the presentation format of solutions on tests etc., oral and/or written presentations and explanations of mathematical theorems, problem solutions and concepts etc.
 | 10% |
| **Summative** * EQAO 10%
* Final Examination – 20%
 | 30% |

**Unit Breakdown**

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| **Unit** | **Description** |
| **1** | **Measuring Figures and Objects****By the end of this course, students will:*** Measure the areas and perimeters of figures and the volumes of objects
* Solve problems related to length of a fence, area of a yard to be seeded and volume of soil to fill a planter.
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| **2** | **Investigating Perimeter and Area of Rectangles****By the end of this course, students will:*** Determine the maximum area of a rectangle for a given perimeter and to determine the minimum perimeter of a rectangle for a given area
* Solve real-world problems, we want to maximum space or minimize cost
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| **3** | **Relationships in Geometry****By the end of this course, students will:*** Understand the properties and relationships in polygons and angles involving parallel lines.
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| **4** | **Proportional Reasoning****By the end of this course, students will:*** Use different proportional reasoning strategies to solve problems involving ratios, rates and percents
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| **5** | **Graphic Relations****By the end of this course, students will:*** Understand the relationship between two quantities can be illustrated with a graph that could be a straight line, a curve or neither of these
* Be able to determine how relationships are used to make predictions and solve problems
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| **6** | **Linear Relations****By the end of this course, students will:*** Understand how linear relations connect to earlier work in this text on proportional reasoning and geometry and measurement concepts
* Understand how real-life situations can be represented as linear relations in different ways.
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| **7** | **Polynomials** **By the end of this course, students will:*** Use different tools to simplify algebraic expressions and to solve equations.
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**COURSE EXPECTATIONS**

**Students are expected to:**

* Show up to class on time and participate regularly
* Show respect for classmates, teachers and equipment they use
* Complete all coursework on time and to the best of their ability

**HOMEWORK/ASSIGNMENTS**

Students are expected to complete all assigned homework. Extra help can be arranged with the teacher when a student is having difficulty or needs extra time. Assignments have due dates and students are expected to respect these. Under special circumstances, extensions may be granted at the teacher’s discretion. Habitual neglect of duty in this regard may result in academic penalty leading to a decrease in overall mark.

Signing below indicates you have read and understand all components of this course, the expectations of your son/daughter and the criteria of which they will be evaluated on. If you have any questions feel free to contact the school at 416 396 2355or by email at ravi.singh@tdsb.on.ca

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(Signature of Student) (Signature of Parent/Guardian)

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Date Date