Principles of Mathematics, Grade 9 Academic (MPM 1D)
Humberside Collegiate Institute
2018 – 2019

Course Code: MPM1D

Course Website: www.MrSinghsclass.com

Teacher Name: Mr. Singh

Course Room: 206

Ministry Document: The Ontario Curriculum, Grades 9 and 10, 2005 - www.edu.gov.on.ca

Textbook: Principles of Mathematics 9 (McGraw-Hill Ryerson)

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.

Overall Expectations:
By the end of this course, students will:
• demonstrate an understanding of the exponent rules of multiplication and division, and apply them to simplify expressions;
• manipulate numerical and polynomial expressions, and solve first-degree equations;
• apply data-management techniques to investigate relationships between two variables;
• demonstrate an understanding of the characteristics of a linear relation;
• connect various representations of a linear relation;
• determine the relationship between the form of an equation and the shape of its graph with respect to linearity and non-linearity;
• determine, through investigation, the properties of the slope and y-intercept of a linear relation;
• solve problems involving linear relations;
• determine, through investigation, the optimal values of various measurements;
• solve problems involving the measurements of two-dimensional shapes and the surface areas and volumes of three-dimensional figures; and
• verify, through investigation facilitated by dynamic geometry software, geometric properties and relationships involving two-dimensional shapes, and apply the results to solving problems.

Topics and Time Allocations:

Unit	Topic of Study	Periods
1	Number Sense – Review and Rational Numbers	10
2	Introduction to Algebra	10
3	Equations	12
4	Linear Relations	12
5	Analytic Geometry	12
6	Scatter Plots	4.5
7	Measurement	7
8	Geometry	8
	EQAO Review and Exam Review	8

Assessment and Evaluation:

- Seventy percent (70%) of the grade will be based on evaluation conducted throughout the year.
- Thirty percent (30%) of the grade will be based on a final evaluation in the form of an examination and the EQAO Assessment.
- Students will be provided with numerous and varied opportunities to demonstrate the full extent of their achievement of the curriculum expectations across all four categories.

CATEGORY	TERM (70%)	FINAL (30%)
Knowledge and Understanding *(Tests, quizzes, assignments)*	35%	EQAO (10%)
Thinking *(Tests, investigations, assignments)*	15%	
Communication *(Tests, assignments)*	15%	and
Application *(Tests, quizzes, assignments)*	35 %	Exam (20%)

Course Website

This course uses a website for course information, see the website listed at the top of the page. Striving for the least environmental impact possible, every attempt will be made to make this a paperless course. As a result, students will be expected to use this website as a resource throughout the term.

www.mrsinghclass.com

Attendance:

If a student is absent from class, he or she will consult the teacher to determine assignments missed, will complete these assignments, and will request extra help if necessary.

Test Policy:

If your child is aware that he/she will miss a test due to an appointment/sports event etc, it is his / her responsibility to let the teacher know **ahead** of time. The student will then make arrangements with the teacher to write the test **ahead** of time. If the student misses a test due to illness, a doctor's note is **required** and student will write test on the first day back to school.

Late Work Policy:

- For each evaluation, the teacher will inform students of the **due date**
- If students are unable to meet the due date (due to compelling and extenuating circumstances, for example illness or bereavement) the student should approach their teacher and negotiate the opportunity for an extended time line **prior** to the assignment due date
- Teachers may request documentation from parent/guardian that a need exists for extension of due date
- In the event that some students do not meet the due date, a reasonable, **ultimate deadline** shall be set at the teacher's discretion. It shall be clearly communicated to the students who are affected. For example, the ultimate deadline could be the date a marked assignment is returned to the class, if the viewing of a marketed assignment will benefit a student who has yet to hand it in.
- Students will lose **5%** per day for late assignments

Student Signature _____ Date _____

Parent Signature _____Date_____