



Principles of Mathematics, Grade 10 Academic (MPM 2D)

HumberSide Collegiate Institute

2018 – 2019

Course Code: MPM2D

Course Website: www.MrSinghsclass.com

Teacher Name: Mr. Singh

Course Room: 206 or 202

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

Textbook: MathPower 10 (McGraw-Hill Ryerson)

Course Description:

This course enables students to broaden their understanding of relationships, and extend their problem solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Overall Expectations:

By the end of this course, students will:

- determine the basic properties of quadratic relations;
- relate transformations of the graph of $y = x^2$ to the algebraic representation $y = a(x - h)^2 + k$;
- solve quadratic equations and interpret the solutions with respect to the corresponding relations
- solve problems involving quadratic relations;
- model and solve problems involving the intersection of two straight lines;
- solve problems using analytic geometry involving properties of lines and line segments;
- verify geometric properties of triangles and quadrilaterals, using analytic geometry;
- use their knowledge of ratio and proportion to investigate similar triangles and solve problems related to similarity;
- solve problems involving right triangles, using the primary trigonometric ratios and the Pythagorean Theorem;
- solve problems involving acute triangles, using the Sine Law and the Cosine Law.

Topics and Time Allocations:

Unit	Topic of Study	Periods
1	Linear Systems	14
2	Polynomials	13
3	Quadratic Relations 1	14
4	Quadratic Relations 2	7
5	Quadratic Equations	12
6	Trigonometry	12
7	Analytic Geometry	11
	Exam Review	5

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.
- 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%	Examination
Thinking (Tests, investigations, assignments)	15%	
Communication (Tests, assignments)	15%	
Application (Tests, quizzes, assignments)	35%	

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

Academic Honesty

Students who present the work of others as their own are guilty of plagiarism and will receive a mark of zero for the work and will have the details of the plagiarism noted in their school records. Students who are guilty of cheating on tests or examinations will receive a mark of zero on the test or examination and have the details of the cheating noted in their school records.

Student Signature _____ Date _____

Parent Signature _____ Date _____