

MPM2D: Principles of Mathematics 10 Academic Syllabus

Semester 1, 2020-21

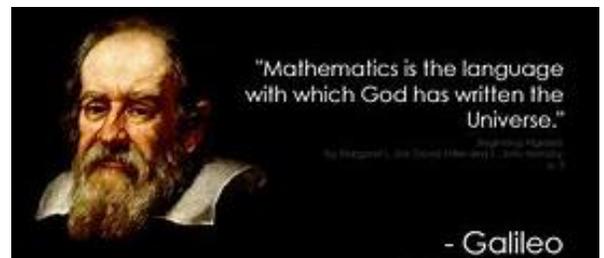
Teachers: Mr. Laliberté – athletics@rchs.on.ca

 Edmodo Class Code: **rw32j8**

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.

Math is fun, challenging, and very, very useful. It was created by real people as a tool to solve real life problems! The applications of math are many: arithmetic, topology, statistics, economics, accounting, computer science, electricity, and much more! Mathematics touches nearly every aspect of our lives; therefore, mathematical literacy is essential to function well in our society.

Mathematics is also the investigation of the way God has ordered the universe He created. The very fact that we can measure our world around us using mathematics is a strong argument for a Creator. By studying math, you will more fully appreciate and comprehend the creative genius that God put into his creation. You will also find that it will train your mind to be logical, systematic, and practical in ways that go far beyond the math classroom.


COURSE CONTENT:

Unit	Chapter	Unit Name
Intro	N/A	Review of Grade 9 Math Skills
1	7	Trigonometry of Right Triangles
2	8	Trigonometry of Acute Triangles
3	1	Linear Systems
4	5	Quadratic Expressions (Factoring and Completing the Square)
5	4 & 6	Quadratic Relations and Quadratic Equations
6	2 & 3	Analytic Geometry & Geometric Properties

STUDENT TEXT: Canton et al. *Principles of Mathematics 10*. McGraw-Hill Ryerson. 2007. Replacement cost: \$90.

COURSE MATERIALS:

- Calculator (non-graphing) – 2 line is ideal
- Ruler, Protractor, Compass
- Eraser
- Pencils (all calculations should be done with pencil)
- Pens (at least 2 readable colours)
- Pencil sharpener
- Lined Paper and Graph Paper
- Textbook
- Agenda
- Tab dividers (6 - one for each unit)

STUDENT EXPECTATIONS:

- 1) **Bring ALL materials to class (as stated above).**
- 2) **Be in your assigned seat when the bell rings and leave when dismissed by your teacher (not the bell).**
- 3) **Treat each person in the room with dignity and respect (teacher and each other).**
- 4) **Follow directions the *first* time they're given (politely ask if something is unclear).**
- 5) **Follow all procedures and policies as outlined in the RCHS student handbook.**

Some Helpful Notes:

- Keep a neat and organized notebook. Notes should have dates and should be in order. Keep tests and quizzes to study from.
- Complete your homework on time with proper headings (name, date, page). Homework will be checked or collected at various times. You can find the unit outlines and notes from the day on the Edmodo Class page.

How will I be assessed?

Assessments FOR Learning:	Assessments AS Learning:	Assessments OF Learning:
<ul style="list-style-type: none"> - Observation - Checks of assigned work - Quizzes - Oral Questioning - Tickets Out of Class 	<ul style="list-style-type: none"> - Peer assessments - Checking Hmk Answers 	<ul style="list-style-type: none"> - Tests - Performance Tasks - Assignments - Exam - Observations and Conversations

Evidence of student achievement for evaluation (OF learning) is collected over time from three different sources – observations, conversations, and student products.

According to Ontario Curriculum Policy Documents, 70% of your final mark comes from evaluations done during the course and 30% of your final mark comes from your performance on the final evaluations at the end of the course.

The mark breakdown for this course is as follows:

ITEMS			CATEGORY	Approximate Weighting
Term Assessments 70%	Tests and Quizzes	36%	Knowledge/Understanding	25%
	Performance Tasks (3)	18%	Thinking/Inquiry	20%
	Assignments (2)	12%	Communication	10%
	Conv/Observe	4%	Application	15%
Final Assessments 30%			Exam	30%

Learning Skills are evaluated and reported separately. Each Learning Skill is reported using E, G, S or N (Excellent, Good, Satisfactory, Needs Improvement). Even though Learning Skills are not part of your mark, they are important aspects to your success in this course and their development is an integral part of your learning.

What are the Learning Skills?

- Responsibility
- Organization
- Independent work
- Collaboration
- Initiative
- Self-regulation

Non Sequitur

