

## MFM1P: Foundations of Mathematics 9 Applied Syllabus

Semester 1, 2017-2018

Mr. Kaiser • [dkaiser@rchs.on.ca](mailto:dkaiser@rchs.on.ca)

Course Webpage found under [rchs.on.ca](http://rchs.on.ca) → Student Life → Class Resources → Grade 9 Courses

### Introduction

Welcome to the Foundations of Mathematics Grade 9 Applied course! 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, etc. 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. If you study Math, it will train your mind to be logical, systematic, and practical. You will find yourself gaining a greater understanding of how things work and growing into a more complete and mature Christian.

### Course Description

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.

Strand	Chapter	Topic
Number Sense and Algebra	Intro	Review of Essential Skills
	9	Polynomials
	1, 8	Equations
Linear Relations	4	Relations
	5, 6	Linear & Non-Linear Relationships
Review	5	Number Sense & Geometry Skills
Measurement and Geometry	11	Exploring Properties of 2D Figures
	2, 3	Measurement Relationships in 3D Figures
	3	Summative Project

### Resources:

- Textbook: Mathematics: Applying the Concepts, 9 (McGraw-Hill), 2006 (**Replacement Cost: \$90**)
- Course Website – can be found at [rchs.on.ca](http://rchs.on.ca) → Student Life → Class Resources → Grade 9 Courses → MFM1P (see this website for a number of great resources!)
- Math Help: Daily at lunch in room 206

### Materials:

- |  |   |
|--|---|
| • 3 ring binder  | • Eraser  |
| • Textbook   | • Ruler   |
| • Agenda   | • Compass   |
| • Lined paper (that you can easily take out and hand in) | • Protractor                                      |
| • Pencils (all work is to be done with pencil)           | • Pens (red and blue)                             |
| • Pencil sharpener                                       | • Dividers or sticky tabs (8 - one for each unit) |
|  | • Calculator (non-graphing) – 2 line is ideal     |

## STUDENT EXPECTATIONS

As a Christian community, we recognise and affirm that God has created us and that He loves each one of us so much that He sent His Son, Jesus Christ, as a sacrifice in our place. As adopted children of God, we are to be channels of Christ's love to others. The following rules will help us to do this in class.

### Rules:

- 1) Bring ALL books/materials to class AND take them all with you when you leave.
- 2) Be in your assigned seat and ready to work when the bell rings.
- 3) Treat each person in the room with dignity and respect (me and each other).
- 4) Follow directions the *first* time they're given (politely ask if something is unclear).

### Some Classroom Procedure Notes (others to be discussed in class):

- Go to the bathroom before class. Do not expect to be allowed to go during class.
- Keep a neat and organized notebook. Notes should have dates and should be in order. **You** are responsible for getting any notes or assignments missed when you are absent (start by asking a peer). Keep tests and quizzes to study from.
- Complete your homework on time with proper headings (name, date, page). Homework will be assigned and checked regularly. Repeated failure to complete homework will result in being sent to Math Help.

---

### Assessment

Assessment can be classified as assessment FOR, AS or OF learning. Assessment FOR and AS learning are designed to help you improve your understanding (and do not count towards your mark), whereas Assessment OF learning tools will comprise your mark in this class. Examples of each are shown in the table below.

Assessments FOR Learning:	Assessments AS Learning:	Assessments OF Learning:
<ul style="list-style-type: none"><li>- Observation</li><li>- Checks of assigned work</li><li>- Quizzes</li><li>- Oral Questioning</li><li>- Tickets Out of Class</li></ul>	<ul style="list-style-type: none"><li>- Peer assessments including working on homework and activities together</li><li>- Checking Hmk Answers</li></ul>	<ul style="list-style-type: none"><li>- Assignments/Projects</li><li>- Tests</li><li>- Performance Tasks</li><li>- Exam</li></ul>

If you know you will be away for a test, discuss this with the teacher at least one class day ahead of the scheduled test day. Tests missed due to illegitimate absence (skipping) will be recorded as zero. Tests missed due to legitimate absence will be written on the return of the student during lunch or after school.

If you require an extension on an assignment, discuss this with the teacher at least 2 class days prior to the due date. Late assignments will be deducted 10% per day (zero after 5 days) and the student will be assigned to Study Hall until the assignment is complete. Please be sure that your assignment is printed and complete prior to the beginning of classes on the day the assignment is due.

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.

Evaluation	Type of Work	Weighting
Term Work	Tests	40%
	Performance Tasks	15%
	Projects	15%
Final Exam		30%

	Category	Weighting
Term Assessments	Knowledge/Understanding	25%
OF Learning	Thinking/Inquiry	20%
	Communication	10%
	Application	15%
Final Exam		30%

### What are the Learning Skills?

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

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 critical to your success in this course and their development is an integral part of your learning.

---