



Course Name: Grade 10 Applied Mathematics

Course Code: MFM2P

Teacher: Ms. Thangaraj

Department: MATH

Credit Value: 1

Prerequisite: MFM1P or MPM1D

Start Date: February 1, 2016

Head of Department: Ms. Thangaraj

Course Description:

This course enables students to consolidate their understanding of linear relations and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and hands-on activities. Students will develop and graph equations in analytic geometry; solve and apply linear systems, using real-life examples; and explore and interpret graphs of quadratic relations. Students will investigate similar triangles, the trigonometry of right triangles, and the measurement of three-dimensional figures. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

OVERALL EXPECTATIONS OF MFM2P:

A: Measurement and Trigonometry

- 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 the surface areas and volumes of three-dimensional figures, and use the imperial and metric systems of measurement.

B: Modelling Linear Relations

- manipulate and solve algebraic equations, as needed to solve problems;
- graph a line and write the equation of a line from given information;
- solve systems of two linear equations, and solve related problems that arise from realistic situations.

C: Quadratic Relations of the Form $y = ax^2 + bx + c$

- manipulate algebraic expressions, as needed to understand quadratic relations;
- identify characteristics of quadratic relations;
- solve problems by interpreting graphs of quadratic relations.

Assessment and Evaluation:

Teachers use a variety of **assessment** strategies to elicit information about student learning. These strategies should be triangulated to include observation, student-teacher conversations, and student products. Teachers can gather information about learning by:

- designing tasks that provide students with a variety of ways to demonstrate their learning;
- observing students as they perform tasks;
- posing questions to help students make their thinking explicit;
- engineering classroom and small-group conversations that encourage students to articulate what they are thinking and further develop their thinking.

Teachers then use the information gathered to adjust instruction and provide feedback

Growing Success, p.34



Evidence of student achievement **for evaluation** is collected over time from three different sources – observations, conversations, and student products. Using multiple sources of evidence increases the reliability and validity of the evaluation of student learning. “Student products” may be in the form of tests or exams and/or assignments for evaluation. Assignments for evaluation may include rich performance tasks, demonstrations, projects, and/or tests. Growing Success p. 39

The final grade will be determined as follows:

- Term Work: 70%
- Culminating Activities: 30%

Learning Skills:

The separate evaluation and reporting of the learning skills in the following six areas reflects their critical role in students' achievement of the curriculum expectations. Students will be assessed continually on the following learning skills:

Works Independently	Teamwork	Organization	Work Habits/Homework	Initiative	Self-Regulation
accepts responsibility for completing tasks, follows instructions, completes assignments on time and with care, uses time effectively	works willingly and cooperatively with others, is sensitive to the needs of others, takes responsibility in sharing the work, shows respect for others ideas and opinions	organizes work, creates a plan to complete tasks, demonstrates ability to organize and manage information	puts forth consistent effort, completes homework on time and with care, uses time effectively, perseveres with complex tasks that require effort	responds to challenges and takes risks, seeks out opportunities for learning, identifies problems to solve, seeks additional information	sets own individual goals and monitors progress towards achieving them

Extra Help:

The staff of Rideau High School is committed to the success of all students. Students are strongly encouraged to seek extra help from the teacher both in and out of the classroom.

Communication:

Please feel free to contact me at the school, 613-746 - 8196, if you have any questions or concerns. My voicemail extension is 240, and my email address is Elizabeth.thangaraj@ocdsb.ca.

