

Sir Wilfrid Laurier Secondary School

Grade 10 Applied Mathematics – MFM 2P

1.0 credit

Course Outline 2016-2017

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.

Strands and Overall Expectations

<p>Measurement and Trigonometry</p> <p>By the end of this course students will:</p> <ul style="list-style-type: none">• 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 surface area and volume of three-dimensional figures and use the imperial and metric systems of measurement
<p>Modeling Linear Relations</p> <p>By the end of this course students will:</p> <ul style="list-style-type: none">• 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
<p>Quadratic Relations of the Form $y = ax^2 + bx + c$</p> <p>By the end of this course students will:</p> <ul style="list-style-type: none">• manipulate algebraic expressions as needed to understand quadratic relations• identify characteristics of quadratic relations• solve problems by interpreting graphs of quadratic relations.

Evaluation

The final report card mark will be calculated according to the student's achievement of the overall expectations of each of the three strands as set out in The Ontario Curriculum Mathematics documents. Students will be given multiple and varied opportunities to demonstrate their achievement in the expectations within each strand throughout the term as well as in the summative activity and final exam.

The final report card mark will be determined as follows:

Term Mark	70% of final grade
Year End Mark (Summative & Exam)	30% of final grade

Guidelines for Missed Evaluations and Academic Fraud

1. Upon missing a test or presentation, students will be required at the teacher's discretion, either to:
 - a) Complete the test or presentation immediately upon return to school; or
 - b) Make arrangements with the teacher for a make-up; or
 - c) Write the missed test Friday morning at 7:30 a.m. of that week.

Failure to complete the missed test/presentation according to the negotiated schedule will result in a mark of zero.

Note: Certain forms of formal summative evaluations (exams, summative project presentations or tasks, etc.) are time sensitive. This means they must be completed at and within a specific time. Students must be present and prepared for these summative evaluations. Any absence will result in a mark of **zero**, unless validated by an official certificate. (ex. Medical Certificate).

2. If an assignment is late or incomplete, a student will be provided with a second opportunity. Students who are provided with a second opportunity, **shall complete the required assignment within five school days**. If no evidence is forthcoming after five days, a mark of zero will be assigned.
3. Copied, borrowed or stolen work provides no evidence of learning. Teacher will document and archive the work in question. Students may be allowed to resubmit the assignment. The teacher and administrator will define the parameters for the completion of this task.

General Course Information

Students must bring the following materials to each class:

- separate Math binder (to hold notes, tests, quizzes)
- pencil case (to hold pencils, erasers, ruler, coloured pens)
- scientific calculator
- lined and graph paper

Textbook

Students will be assigned a duotang in-class with practice questions. Students will answer all questions on lined or graph paper. Any duotang with writing or damage will cost \$5 to replace.

Teacher Contact Information

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