

Sir Wilfrid Laurier Secondary School

Grade 9 Applied Mathematics – MFM 1P

1.0 credit

Course Outline

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.

Strands and Subgroups

<p>Number Sense and Algebra</p> <ul style="list-style-type: none"> • solving problems involving proportional reasoning; • simplifying expressions in one variable, and solving simple first-degree equations. 	<p>Linear Relations</p> <ul style="list-style-type: none"> • using data management to investigate relationships • determining characteristics of linear relations • investigating constant rate of change • connecting various representations of linear relations and solving problems using the representations
<p>Measurement and Geometry</p> <ul style="list-style-type: none"> • investigating the optimal values of measurements of rectangles • solving problems involving perimeter, area, and volume • investigating and applying geometric relationships 	

Evaluation

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

A final mark will be determined by achievement in *all* areas with knowledge and skills described by:

a high degree of effectiveness	Level 4 (80-100)	Achievement surpasses the provincial standard.
considerable effectiveness	Level 3 (70-79)	Achievement represents the provincial standard .
some effectiveness	Level 2 (60-69)	Achievement is approaching provincial standard.
limited effectiveness	Level 1 (50-59)	Achievement falls much below the provincial standard.
	Below Level 1 (49 and below)	*Student does not achieve at least <i>limited effectiveness</i> in <u>all</u> overall expectations.

The final report card mark will be determined as follows:

Term Mark	70% of final grade
Final Exam and Summative Activity (EQAO Assessment)	30% of final grade

Attendance

Regular attendance is an integral part of learning.

Students are responsible for completing all work missed due to absence.

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 Duotang for notes
- Math binder for class work/home work, tests, quizzes, handouts
- pencil case (to hold pencils, erasers, ruler, coloured pens)
- scientific calculator
- lined and graph papers