

Sir Wilfrid Laurier Secondary School Grade 11 Foundations for College Math – MBF 3C 1.0 credit Course Outline 2016 - 2017

Course Description

This course enables students to broaden their understanding of mathematics as a problem solving tool in the real world. Students will extend their understanding of quadratic relations; investigate situations involving exponential growth; solve problems involving compound interest; solve financial problems connected with vehicle ownership; develop their ability to reason by collecting, analysing, and evaluating data involving one variable; connect probability and statistics; and solve problems in geometry and trigonometry. Students will consolidate their mathematical skills as they solve problems and communicate their thinking.

Strands and Subgroups

Mathematical Models	Personal Finance
 make connections between the numeric, graphical, and algebraic representations of quadratic relations, and use the connections to solve problems; demonstrate an understanding of exponents, and make connections between the numeric, graphical, and algebraic representations of exponential relations; describe and represent exponential relations, and solve problems involving exponential relations arising from real-world applications. 	 compare simple and compound interest, relate compound interest to exponential growth, and solve problems involving compound interest; compare services available from financial institutions, and solve problems involving the cost of making purchases on credit; interpret information about owning and operating a vehicle, and solve problems involving the associated costs.
Geometry and Trigonometry	Data Management
 represent, in a variety of ways, two-dimensional shapes and three-dimensional figures arising from real-world applications, and solve design problems; solve problems involving trigonometry in acute triangles using the sine law and the cosine law, including problems arising from real-world applications. 	 solve problems involving one-variable data by collecting, organizing, analysing, and evaluating data; determine and represent probability, and identify and interpret its applications.

Evaluation

The final report card mark will be determined as follows:

Term Mark	70% of final grade
Summative Activity	10% of final grade
Final Exam	20% of final grade

The term mark (70%) will be evaluated as follows:

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.

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 one morning at 7:30 a.m. of that week with the administration.

Failure to complete the missed test/presentation according to the negotiated schedule will indicate that the student has not completed a part of the course and might result in the student not earning the credit.

<u>Note:</u> 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. These absences must be validated by an official certificate. (ex. Medical Certificate).

- 2. If an assignment is late or incomplete, a student will be provided with another opportunity. Please note that there will be a specified time period in which the students will be provided with this opportunity.
- 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:

- textbook (when applicable)
- separate Math binder (to hold notes, tests, quizzes, handouts)
- pencil case (to hold pencils, erasers, ruler)
- scientific calculator
- lined and graph papers

Course Website: https://sites.google.com/a/ocdsb.ca/ms-davison/

The textbook that will be issued is <u>Foundations for College Mathematics 11</u>, McGraw-Hill Ryerson (\$97.15 incl. HST). The student is responsible for the cost of replacement or repairs, if the text is lost, or damaged.

Graphing Calculators

Calculators with graphing technology may be used in the lessons, and are of great assistance for homework. Students without a handheld model can access online versions at home or install graphing apps onto their smart phones.

If students are at home and don't have a graphing calculator and can't find an app, here's a website calculator for Mac or PC that is free.

https://www.desmos.com/calculator

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