



# Westside Secondary School

Orangeville, Ontario, Canada



519-938-9355

## Course Outline

[www.ugdsb.on.ca/westside](http://www.ugdsb.on.ca/westside)

**Course:** MBF3C - Gr. 11 Mathematics of Personal Finance

**Program Leader:** Mr. Marchildon

**Teacher:** S. Sabatine

**Course Website:** Google Classroom

### **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, analyzing, 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.

### **Big Ideas** (overall learning outcomes for the course):

- Modelling situations in real life with functions helps us make educated predictions
- Looking for patterns in math helps us better understand the world around us
- Knowledge is power

### **Overall Curriculum Expectations:**

#### *Mathematical Models*

- 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

#### *Personal Finance*

- 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 purchase on credit
- Interpret information about owning and operating a vehicle, and solve problems involving the associated costs

#### *Geometry and Trigonometry*

- 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

#### *Data Management*

- Solve problems involving one-variable data by collecting, organizing, analyzing, and evaluating data
- Determine and represent probability, and identify and interpret applications

### **Instructional Strategies:**

Westside teaching staff will use a variety of instructional strategies to help students develop and improve skills in the following areas: character, citizenship, communication, critical thinking and problem solving, collaboration and teamwork, and creativity and imagination.



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## Assessment and Evaluation:

Formative assessments are used to improve student learning by providing varied opportunities to demonstrate an understanding of course expectations in preparation for summative evaluations. Students will have the opportunity to complete mastery quizzes throughout each unit which may lead to a reduced summative assessment. Summative evaluations test groups of key expectations. Failure to complete a summative evaluation may result in the expectations of the course not being met and the credit not being granted. The following soft skills will be assessed:

*Responsibility, Organization, Independent Work, Collaboration, Initiative, Self-Regulation*

More details about Westside's Assessment and Evaluation Policy is available at:

<http://www.ugdsb.ca/westside/wp-content/uploads/sites/74/2016/12/Westside-Assessment.pdf>

## Late Policy

Students are expected to complete all assigned work and submit it by the teacher's established due date. Every attempt will be made to encourage students to complete all assigned work on time so their grade represents their actual achievement. For late and missed summative assessments, please see the ***Westside Students' Contract for Missing Evidence of Learning***

**Achievement Categories:** Student learning is assessed and evaluated with respect to the following four categories of knowledge and skills.

**Knowledge and Understanding:** 25 %  
**Thinking:** 25%  
**Communication:** 25 %  
**Application:** 25%

	Term Work (70%)
<b>Unit of Study</b>	<b>Summative Evaluations</b>
Finance	Unit Test & Summative Assignment
Statistics	Unit Test
Probability	Summative Assignment
Trigonometry	Unit Test
Exponential Functions	Unit Test
Quadratics	Unit Test & Summative Assignment
	<b>Final Summative (30%)</b>
In-class project	15%
Exam	15%



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## Required Course Materials:

Pencils, Paper, Scientific Calculator

## Student Expectations:

Every student enrolled in Mathematics at Westside is expected to:

- be prepared for class each and every day. This means you bring a writing utensil, calculator and paper with you to class
- actively participate in class discussions
- be on time to class
- complete homework assigned
- learn to problem solve using the techniques you will learn in class

## Final Assessments/Examinations

Culminating activities for each unit must be completed by the student in order to achieve the credit. Failure to complete any one of them may result in loss of credit.

**There are no extensions or exemptions for final assessments without the approval from an administrator.**

The following soft skills will be assessed:

Responsibility, Organization, Independent Work, Collaboration, Initiative, Self-Regulation

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I have read and understand the Course Outline: (front and back)

Student Name (please print): \_\_\_\_\_ Signature: \_\_\_\_\_

Parent/Guardian Name (please print): \_\_\_\_\_ Signature: \_\_\_\_\_

Parent/Guardian email (please print): \_\_\_\_\_