



Cameron Heights Collegiate Institute

301 Charles Street E., Kitchener, Ontario N2G 2P8 (519)-578-8330 www.chci.wrdsb.on.ca

Subject	Grade	Level	Code	Prerequisite
Mathematics	11	College	MBF3CI	10 Academic or 10 Applied

Course Description

This course introduces basic features of the function by extending students' experiences with quadratic relations. It focuses on quadratic, trigonometric, and exponential functions and their use in modelling real-world situations. Students will represent functions numerically, graphically, and algebraically; simplify expressions; solve equations; and solve problems relating to applications. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Ministry Website

<http://www.edu.gov.on.ca/eng/curriculum/secondary/math1112curr.pdf>

	Unit of Study	Overall Expectations (essential understandings)	Assessment
70%	Quadratic Relations	<ul style="list-style-type: none"> Make connections between the numeric, graphical, and algebraic representations of quadratic relations, and use the connections to solve problems 	<ul style="list-style-type: none"> Variety of assessments in the form of quizzes and assignments (~1-2%) Summative unit test (~10%)
	Exponential Relations	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Variety of assessments in the form of quizzes and assignments (~1-2%) Summative unit test (~10%)
	Trigonometry	<ul style="list-style-type: none"> Solve problems involving trigonometry in acute triangles using the sine law and the cosine law, including problems arising from real-world applications 	<ul style="list-style-type: none"> Variety of assessments in the form of quizzes and assignments (~1-2%) Summative unit test (~10%)
	Financial Mathematics	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Variety of assessments in the form of quizzes and assignments (~1-2%) Summative unit test (~10%)
	Geometry	<ul style="list-style-type: none"> Represent, in a variety of ways, two-dimensional shapes and three dimensional figures arising from real-world applications, and solve design problems. 	<ul style="list-style-type: none"> Variety of assessments in the form of quizzes and assignments (~1-2%) Summative unit test (~10%)
	Statistics and Probability	<ul style="list-style-type: none"> Solve problems involving one-variable data by collecting, organizing, analysing, and evaluating data Determine and represent probability, and identify and interpret its applications 	<ul style="list-style-type: none"> Variety of assessments in the form of quizzes and assignments (~1-2%) Summative unit test (~10%)
30%	Final Exam	<ul style="list-style-type: none"> Will include all of the overall expectations listed within the units of study 	<ul style="list-style-type: none"> Summative Final Exam (30%)