

991 St. Clair Ave. West
 Toronto, Ontario M6E 1A3
 Telephone: (416) 393-1780
 Fax: (416) 393-8169

Website: <http://schools.tdsb.on.ca/oakwoodci/>

**Course of Study: Functions and Applications,
University/College Preparation**

Academic Year: 2019-2020		Teacher Name: Mr. Burtch	
Department: Mathematics		Department Head: Mr. Burtch	
Date developed: June 2009		Revised:	
Course Title	Principles of Mathematics	Course Code	MCF3M1
Prerequisite	Principles of Mathematics, Grade 10, Academic; Foundations of Mathematics, Grade 10 Applied	Grade	11
Level	Mixed	Credit Value	1.0

Course Description		
Ontario Ministry of Education Document:		
<p>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.</p>		
Textbook:		
Instructional Strands/Units		
Strand/Unit Titles	Approx. Time Spent	Overall Expectations/Unit Description
Quadratic Functions	3 Months	<ul style="list-style-type: none"> – expand and simplify quadratic expressions, solve quadratic equations, and relate the roots of a quadratic equation to the corresponding graph; – demonstrate an understanding of functions, and make connections between the numeric, graphical, and algebraic representations of quadratic functions; – solve problems involving quadratic functions, including problems arising from real-world applications.

Instructional Strands/Units (Cont'd)		
Strand/Unit Titles	Approx. Time Spent	Overall Expectations/Unit Description
Exponential Functions	3 Months	<ul style="list-style-type: none"> – simplify and evaluate numerical expressions involving exponents, and make connections between the numeric, graphical, and algebraic representations of exponential functions; – identify and represent exponential functions, and solve problems involving exponential functions, including problems arising from real-world applications; – demonstrate an understanding of compound interest and annuities, and solve related problems.
Trigonometric Functions	3 Months	<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; – demonstrate an understanding of periodic relationships and the sine function, and make connections between the numeric, graphical, and algebraic representations of sine functions; – identify and represent sine functions, and solve problems involving sine functions, including problems arising from real-world applications.

Student Evaluation Criteria			
Term Work		Culminating Activities	
Categories			
Knowledge/Understanding (K/U)	%15 – 20	Final Exam	% 20
Inquiry/Thinking (T/I)	% 15 – 20	Culminating Activity	% 10
Communication (C)	% 15 – 20		
Application (A)	% 15 – 20		
Term Total 70%		Culminating Activity Total 30%	

	First Report	Second Report	Interim Report	Final Report
Progress Reports				
Report Cards				
Parent/Teacher Interviews				

Assessment of Learning Skills

The 5 learning skills, independent work, teamwork, organization, homework and initiative, will be assessed using a variety of techniques including, but not limited to, homework checks, lab participation, group work/research, class involvement, cooperative activities and independent work

Assessment and Evaluation Tools

<i>Knowledge/Understanding</i>	<i>Thinking/Inquiry and Application</i>	<i>Communication</i>
Quizzes	Investigations	Discussions
Tests	Projects	Participation
In-Class Assignments	Problem Solving	Written and oral communication of mathematical ideas
Homework	Real-World Applications	
	Explorations	
	Word Problems	

Communication

<i>Parents</i>	<i>Contact the Math department at 393-1790 ext. 20038</i>
<i>Students</i>	<i>Contact your teacher in person</i>
<i>Extra help</i>	<i>By arrangement with your teacher</i>
<i>School Website</i>	<i>http://schools.tdsb.on.ca/OakwoodCI</i>

Department Policies

Success Plan

1. Come to class every day, on time, with a pencil, eraser, ruler , scientific calculator and binder.
2. Listen to, and participate in, the lesson.
3. Complete the work assigned in class.
4. Ask for help when you need it.
5. Help your classmates.
6. Complete all evaluations to the best of your ability.

Textbooks

Students will be issued a textbook for use during the school year and are expected to bring it to class each period. Replacement cost \$80

Evaluation

Evaluation takes a balanced approach (see above) to the 4 categories of achievement (K/U, T/I, C, A) and blends these so that most evaluation tasks include 2 or more of the categories. For purposes of simplification, the final mark will be calculated as follows:

<i>Course Work, including: Tests, Quizzes, Assignments, etc. (K/U, C, A)</i>	<i>70%</i>
<i>Culminating Activities (incl. Final Exam) (K/U, T/I, C, A)</i>	<i>30 %</i>

Teachers will communicate to students the approximate value of assignments and their placement in the evaluation chart.

Attendance, Punctuality and Work Habits

It is expected that students arrive punctually to all classes and that attendance is regular. When students are absent, it is the responsibility of the student to find out what was missed. This should be done at an appropriate time such as before school on the date of return. Students are not to disrupt the learning of others by catching up on missed work during class. This includes requests for missed/lost handouts. All such matters should be dealt with before class commences.

Homework will be assigned on a regular basis. Students are expected to demonstrate initiative and self-direction in their approach to homework. Failure to do homework will adversely affect a student's ability to achieve high marks.

Coursework – Tests, Assignments, etc.

Students are expected to write tests/quizzes on the set date. Students must make arrangements with the teacher in advance of the test date if they know that they will be away. In such cases, the student is expected to make arrangements with their teacher to make up the missed evaluation. If students are absent for an officially recognized excuse, they must present documentation and the teacher will set a date for an alternative test to be written.

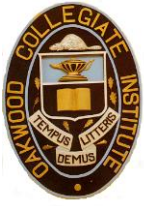
Assignments – each assignment has a due date. Assignments are due at the start of the period on the due date, unless otherwise specified. Late assignments will be accepted until the ultimate due date. This is usually the date on which marked assignments are returned. After this date, assignments may not be submitted and the student will receive a zero. Teachers may use a variety of techniques to encourage students to submit late work. This may include, if necessary, a mark reduction of 10%.

Exams and Culminating Activities

Exams and culminating evaluations must be done on the due date. It is usually not possible to reschedule these evaluations or to provide alternative assignments. Therefore a mark of zero will be assigned unless suitable documentation (medical certificate, etc.) is received. In such cases, the teacher, in consultation with colleagues and the administration, will determine an appropriate mark.

Course:

Teacher:



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COURSE: _____

TEACHER: _____

Please acknowledge that you have read this outline:

<i>Date:</i>	<i>Parent Signature</i>
<i>Date:</i>	<i>Student Signature</i>

Please return this to _____ by _____