

## COURSE INFORMATION SHEET

**DATE:** SEPTEMBER 2007  
**SECONDARY SCHOOL:** Brebeuf College  
**DEPARTMENT HEAD:** Mr. Michael Daoust  
**TEACHER:** Mr. Ermes Lena  
**DEPARTMENT:** Mathematics



<b>CURRICULUM POLICY DOCUMENT</b>		<i>The Ontario Curriculum, Grades 11 and 12, Mathematics, 2000.</i>	
<b>COURSE TITLE</b>	Mathematics of Personal Financing	<b>COURSE CODE</b>	MBF 3C1
<b>PRE-REQUISITE</b>	Grade 10 Applied	<b>GRADE &amp; TYPE</b>	11 Applied
<b>FULL YEAR / SEMESTER</b>	Semester	<b>CREDIT VALUE</b>	1.0

**COURSE DESCRIPTION (AS SPECIFIED IN MINISTRY OF EDUCATION POLICY DOCUMENT)**

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.

<b>LISTED IN ORDER OF INSTRUCTIONAL DELIVERY</b>		
<b>STRAND / UNIT TITLES</b>	<b>HOUR</b>	<b>OVERALL EXPECTATIONS / UNIT DESCRIPTION</b>
<b>MATHEMATICAL Models</b>	<b>20</b>	<p>By the end of this course, students will:</p> <ol style="list-style-type: none"> <li>1. make connections between the numeric, graphical, and algebraic representations of quadratic relations, and use the connections to solve problems;</li> <li>2. demonstrate an understanding of exponents, and make connections between the numeric, graphical, and algebraic representations of exponential relations;</li> <li>3. describe and represent exponential relations, and solve problems involving exponential relations arising from real-world applications.</li> </ol>
<b>Personal Finance</b>	<b>30</b>	<p>By the end of this course, students will:</p> <ol style="list-style-type: none"> <li>1. compare simple and compound interest, relate compound interest to exponential growth, and solve problems involving compound interest;</li> <li>2. compare services available from financial institutions, and solve problems involving the cost of making purchases on credit;</li> <li>3. interpret information about owning and operating a vehicle, and solve problems involving the associated costs.</li> </ol>
<b>Geometry and Trigonometry</b>	<b>30</b>	<p>By the end of this course, students will:</p> <ol style="list-style-type: none"> <li>1. represent, in a variety of ways, two-dimensional shapes and three-dimensional figures arising from real-world applications, and solve design problems;</li> <li>2. solve problems involving trigonometry in acute triangles using the sine law and the cosine law, including problems arising from real-world applications.</li> </ol>
<b>Data Management</b>	<b>30</b>	<p>By the end of this course, students will:</p> <ol style="list-style-type: none"> <li>1. solve problems involving one-variable data by collecting, organizing, analysing, and evaluating data;</li> <li>2. determine and represent probability, and identify and interpret its applications.</li> </ol>


STUDENT EVALUATION CRITERIA				
TERM – 70%		FINAL – 30%		FINAL REPORT CARD GRADE CALCULATION – 100%
$10 \leq$ RELATIVE EMPHASIS / WEIGHTING $\leq 40$		RELATIVE EMPHASIS / WEIGHTING		TERM TOTAL + FINAL TOTAL = REPORT CARD MARK
KNOWLEDGE/UNDERSTANDING	22.5			
INQUIRY/THINKING	15			
COMMUNICATION	10			
APPLICATION	22.5			
<b>TERM TOTAL</b>	<b>70</b>	<b>FINAL TOTAL</b>	<b>30</b>	

ASSESSMENT FORMAT USED					
WRITTEN		PERFORMANCE		OTHER	
e.g. Slogan		e.g. Manipulative Skills		e.g. Teacher Observation	x
Short Answer	x	Extended Investigations	x	Interviews	
Open/Free Response	x	Projects	x	Portfolios	
Essay/Journal		Concept Mapping		Skills Checklist	x
Papers/Reports	x	Venn Diagrams			
Multiple Choice		Presentations	x		

RESOURCES (EXAMPLES PROVIDED)	
TEXTBOOK	Foundations for College Mathematics ( McGraw-Hill )
STUDENT MATERIALS	
EXCURSIONS	
COMPUTER USE	Yes
COURSE RELATED WEBSITES	

POLICIES & PROCEDURES (EXAMPLES PROVIDED)	
PLAGIARISM	N.A.
LATE ASSIGNMENTS	Assignments accepted until the day returned by the teacher.

<b>MISSED WORK</b>	Teachers available before school at 8:30 AM every morning and after school upon request to help students.
<b>ABSENCES</b>	A signed note from a parent is required by the Office when returning from an absence. Students are expected to catch up on missed work upon return to school.
<b>HOMEWORK</b>	Homework is assigned every night to consolidate and extend student learning. On average 30 to 45 minutes of homework is assigned per day.
<b>TEACHER CONTACTS</b>	See missed work section above. Mid-term reports are issued in November and April. Early warning letters for failing students are issued in on two set dates as directed by administration. Letters of concern may be sent home at any time.
<b>EXTRA HELP</b>	See missed work (above).
<b>REPORTING DATES</b>	Final exam held at the end of the course.

<b>LEARNING SKILLS CRITERIA</b>			
<b>IN EACH REPORTING PERIOD, REPORT ON THE QUALITY OF THE LEARNING SKILLS DEMONSTRATED BY THE STUDENT IN EACH OF THE CATEGORIES IDENTIFIED ON THE REPORT CARD USING THE FOLLOWING LETTER SYMBOLS.</b>			
<b>E–EXCELLENT</b>	<b>G–GOOD</b>	<b>S–SATISFACTORY</b>	<b>N–NEEDS IMPROVEMENT</b>
<b>SKILL: WORKS INDEPENDENTLY</b>			
<b>INDICATORS:</b>			
<ul style="list-style-type: none"> <li>• accomplishes tasks independently</li> <li>• accepts responsibility for completing tasks</li> <li>• follows instructions</li> <li>• regularly completes assignments on time and with care</li> <li>• demonstrates self-direction in learning</li> <li>• independently selects, evaluates, and uses appropriate learning materials, resources, and activities</li> </ul>		<ul style="list-style-type: none"> <li>• demonstrates persistence in bringing tasks to completion</li> <li>• uses time effectively</li> <li>• uses prior knowledge and experience to solve problems and make decisions</li> <li>• reflects on learning experiences</li> </ul>	
<b>SKILL: ORGANIZATION</b>			
<b>INDICATORS:</b>			
<ul style="list-style-type: none"> <li>• organizes work when faced with a number of tasks</li> <li>• devises and follows a coherent plan to complete a task</li> <li>• follows specific steps to reach goals or to make improvements</li> <li>• revises steps and strategies when necessary to achieve a goal</li> </ul>		<ul style="list-style-type: none"> <li>• manages and uses time effectively and creatively</li> <li>• demonstrates ability to organize and manage information</li> <li>• follows an effective process for inquiry and research</li> <li>• uses appropriate information technologies to organize information and tasks</li> </ul>	
<b>SKILL: INITIATIVE</b>			
<b>INDICATORS:</b>			
<ul style="list-style-type: none"> <li>• seeks out new opportunities for learning</li> <li>• responds to challenges and takes risks</li> <li>• demonstrates interest and curiosity about concepts, objects, events, and resources</li> <li>• seeks necessary and additional information in print, electronic, and media resources</li> <li>• identifies problems to solve, conducts investigations, and generates questions for further inquiry</li> <li>• requires little prompting to complete a task, displaying self-motivation and self-direction</li> </ul>		<ul style="list-style-type: none"> <li>• approaches new learning situations with confidence and a positive attitude</li> <li>• develops original ideas and devises innovative procedures</li> <li>• attempts a variety of learning activities</li> <li>• seeks assistance when needed</li> <li>• uses information technologies in creative ways to improve learning for self or others</li> </ul>	
<b>SKILL: TEAMWORK</b>			
<b>INDICATORS:</b>			
<ul style="list-style-type: none"> <li>• works willingly and cooperatively with others</li> <li>• shares resources, materials, and equipment with others</li> <li>• responds and is sensitive to the needs and welfare of others</li> <li>• solves problems collaboratively</li> <li>• accepts various roles, including leadership roles</li> <li>• takes responsibility for his or her own share of the work to be done</li> <li>• works to help achieve the goals of the group or the class</li> <li>• helps to motivate others, encouraging them to participate</li> <li>• contributes information and ideas to solve problems and make decisions</li> </ul>		<ul style="list-style-type: none"> <li>• questions the ideas of the group to seek clarification, test thinking, or reach agreement</li> <li>• shows respect for the ideas and opinions of others in the group or class</li> <li>• listens attentively, without interrupting</li> <li>• in discussions, paraphrases points of view and asks questions to clarify meaning and promote understanding</li> <li>• recognizes the contribution of group members by means of encouragement, support, or praise</li> <li>• seeks consensus and negotiates agreement before making decisions</li> </ul>	
<b>SKILL: WORK HABITS/HOMEWORK</b>			
<b>INDICATORS:</b>			
<ul style="list-style-type: none"> <li>• completes homework on time and with care</li> <li>• puts forth consistent effort</li> <li>• follows directions</li> <li>• shows attention to detail</li> <li>• uses materials and equipment effectively</li> </ul>		<ul style="list-style-type: none"> <li>• begins work promptly and uses time effectively</li> <li>• perseveres with complex projects that require sustained effort</li> <li>• applies effective study practices</li> </ul>	

**NOTE:** The above chart is a reformatting of the skills identified in the Ministry of Education's *Guide to the Provincial Report Card, Grades 9 – 12 : Appendix C: pages 27 to 29*.