



# CARDINAL LEGER CATHOLIC SECONDARY SCHOOL

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*We believe that each one, created in the image and likeness of God, is called by name into the Dufferin-Peel community to realize the Ontario Catholic School Graduate Expectations to the fullest extent possible as we all journey from the early years to vocation.*

## COURSE OUTLINE

<b>Department:</b>	Mathematics
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<b>Course:</b>	Foundations for College Mathematics 11
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<b>Course Code:</b>	MBF3C1
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<b>Common Course Calendar</b>	<b>Course Description:</b>
	<p>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.</p> <p>This course will help students address the Ontario Catholic School Graduate Expectation that they adopt a holistic approach to life by integrating learning from various subject areas and experience.</p>

<b>Ministry/ICE Curriculum Documents</b>	<b>Strand/Unit Title</b>	<b>Corresponding Catholic Graduate Expectation Indicators for each Strand/Unit</b>
	<p><b>Mathematical Models</b>            By the end of this course, students will:</p> <ul style="list-style-type: none"> <li>a. make connections between the numeric, graphical, and algebraic representations of quadratic relations, and use the connections to solve problems;</li> <li>b. demonstrate an understanding of exponents, and make connections between the numeric, graphical, and algebraic representations of exponential relations;</li> <li>c. describe and represent exponential relations, and solve problems involving exponential relations arising from real-world applications</li> </ul>	<p>- <b>thinks reflectively and creatively to evaluate situations and solve problems</b></p>

	<p><b>Personal Finance</b> By the end of this course, students will:</p> <p>a. compare simple and compound interest, relate compound interest to exponential growth, and solve problems involving compound interest;</p> <p>b. compare services available from financial institutions, and solve problems involving the cost of making purchases on credit;</p> <p>c. interpret information about owning and operating a vehicle, and solve problems involving the associated cost</p> <p><b>Geometry and Trigonometry</b> By the end of this course, students will:</p> <p>a. represent, in a variety of ways, two-dimensional shapes and three-dimensional figures arising from real-world applications, and solve design problems;</p> <p>b. solve problems involving trigonometry in acute triangles using the sine law and the cosine law, including problems arising from real-world applications.</p> <p><b>Data Management</b> By the end of this course, students will:</p> <p>a. solve problems involving one-variable data by collecting, organizing, analyzing, and evaluating data;</p> <p>b. determine and represent probability, and identify and interpret its applications.</p>	<p>- <b>Thinks critically about the meaning and purpose of work.</b></p> <p>- <b>Applies effective communication, decision-making, problem-solving, time and resource management skills.</b></p> <p>- <b>Sets appropriate goals and priorities in school, work and personal life</b></p>
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### Assessment and Evaluation:

Category Weightings	Weight %
Knowledge/Understanding	30
Thinking	20
Application	30
Communication	20

Final Summative Assessments	Overall Weighting
Term Work	70 %
CPT	10%
Exam	20%

### Learning Skills and Work Habits

E= Excellent G=Good S=Satisfactory N= Needs Improvement

Responsibility	<ul style="list-style-type: none"> <li>• Fulfills responsibility and commitments.</li> <li>• Takes responsibility for and manages own behavior.</li> </ul>
Organization	<ul style="list-style-type: none"> <li>• Devises and follows a plan and process for completing tasks.</li> <li>• Establishes priorities and manages time</li> </ul>
Independent Work	<ul style="list-style-type: none"> <li>• Independently monitors, assesses, and revises plans to complete tasks and meet goals.</li> <li>• Uses class time to complete tasks.</li> </ul>
Collaboration	<ul style="list-style-type: none"> <li>• Accepts various roles and an equitable share of work in a group.</li> <li>• Builds healthy peer-to-peer relationships.</li> </ul>
Initiative	<ul style="list-style-type: none"> <li>• Looks for and acts on new ideas and opportunities.</li> <li>• Approaches new tasks with a positive attitude.</li> </ul>
Self-Regulation	<ul style="list-style-type: none"> <li>• Sets own goals and monitors progress towards achieving them.</li> <li>• Seeks clarification or assistance when needed.</li> </ul>