

# T. L. KENNEDY SECONDARY SCHOOL

## Course Outline

The organization and evaluation of this course has been designed to conform to the requirements of Ontario Secondary Schools, Education Policy and Program Update, and Provincial Curriculum Policy.

Department/ Grade	Math – Grade 12	Ministry Course Code & Title	MAP4C0 – College Preparation Foundations for College Mathematics	Prerequisite	MCF3M0 or MBF3C0
<b>Ministry Course Description</b>	<p>This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.</p>				
<b>The Overarching Learning Goals</b>	<p>Students will develop problem solving abilities by reasoning and proving mathematical arguments. After selecting the appropriate tools, upon completion of the problem, they should be able to reflect on their approach and make connections to other areas of life. They will develop their ability to communicate mathematical thinking through a variety of representations; oral, written or visual. This will apply to the four units of study:</p> <p><b>Geometry and Trigonometry</b> Solving problem of measurement and geometry of real-world applications. Optimizing dimensions of two and three dimensional shapes. Using trigonometric ratios to solve real-world problems related to acute and obtuse triangles as well as using the sine law and cosine law.</p> <p><b>Data Management</b> Analyzing, interpreting and drawing conclusions from two variable data using variety of tools. Recognizing that data management plays a role in many industries and occupations.</p> <p><b>Personal Finance</b> Understanding annuities, including mortgages and solving problems using technology. Determining the costs associated with owning or renting accommodations. Designing personal budgets.</p> <p><b>Mathematical Models</b> Solving problems involving powers with rational exponents using both algebraic and graphical representations. Using common bases to solve problems. Describing trends based on graphs and making connections between linear, quadratic and exponential relations of real-world applications.</p>				

**ASSESSMENT AND EVALUATION GUIDELINES:** *The primary purpose of assessment is to improve student learning.* Assessment and evaluation are based on the curriculum expectations and levels of achievement outlined in the provincial curriculum document. Evidence of student achievement for evaluation is collected over time from three different sources: **teacher observations, conversations with the student and student products.**

**Overall Expectations** – According to Growing Success students must demonstrate their learning of all curriculum overall expectation during the term and again in the final evaluation. Please visit <http://www.edu.gov.on.ca/eng/> for all curriculum documents.

## ASSESSMENT OF LEARNING SKILLS AND WORK HABITS

The following learning skills and work habits will be fostered throughout this course and assessed on the report card.

Learning Skills and Work Habits	Sample Behaviours		
<b>Responsibility</b>	<ul style="list-style-type: none"> <li>➤ completes/submits homework, and assignments according to agreed upon timelines</li> <li>➤ takes responsibility for and manages own behaviour</li> </ul>		
<b>Organization</b>	<ul style="list-style-type: none"> <li>➤ develops a plan for completing work</li> <li>➤ establishes priorities and manages time to complete tasks and achieve goals</li> <li>➤ identifies, gathers, evaluates, and uses information, technology, and resources to complete task</li> </ul>		
<b>Independent Work</b>	<ul style="list-style-type: none"> <li>➤ uses class time appropriately to complete tasks</li> <li>➤ follows instruction with minimal supervision</li> </ul>		
<b>Collaboration</b>	<ul style="list-style-type: none"> <li>➤ accepts various roles and an equitable share of work in a group</li> <li>➤ responds positively to the ideas, opinions, values and traditions of others</li> </ul>		
<b>Initiative</b>	<ul style="list-style-type: none"> <li>➤ looks for and acts on new ideas and opportunities for learning</li> <li>➤ demonstrates curiosity and interest in learning</li> </ul>		
<b>Self-Regulation</b>	<ul style="list-style-type: none"> <li>➤ sets individual goals and monitors progress towards achieving them</li> <li>➤ perseveres through challenges, and seeks clarification or assistance when needed</li> </ul>		
<b>E - Excellent</b>	<b>G - Good</b>	<b>S - Satisfactory</b>	<b>N - Needs Improvement</b>

**The final grade (percentage mark) will be determined as follows:**

70% Term Work	30% Final Evaluation
Over the semester, students will demonstrate their level of understanding of course skills and content through the evaluation products listed under "Term Assessments"	Summative tasks will take place in the last half of the semester. Based on ministry documents, it is the expectation that students be present for all parts of the final evaluation and demonstrates their learning.

Our courses will balance the four achievement categories in such a way that every category is appropriately represented as learning goals are completed. Categories will not be weighted with percentages to avoid misrepresenting student achievement.

Knowledge and Understanding	Thinking	Communication	Application
Facts and concepts (knowledge), and the comprehension of their meaning and significance (understanding)	The use of critical and creative thinking skills and/or processes.	The expression of meaning through various forms including oral, visual, and written.	The use of knowledge and skills to make connections within and between various contexts.

Course Units of Study	Term Assessments (70% of the Final Mark)
<b>Unit One: Geometry and Trigonometry</b>	Students will write a quiz once each section of the chapter has been completed in preparation for their chapter test. Chapter tests occur at the end of the chapter and students are given advanced notice to prepare for the test. Tests will address Knowledge and Understanding, Communication Application and Thinking achievement categories. Assignments will be given as needed. Students who are absent on the day of an evaluation for reasons such as illness, field trip or suspension are responsible for meeting the teacher to make alternative arrangements to submit/complete the evaluation.
<b>Unit Two: Data Management</b>	
<b>Unit Three: Personal Finance</b>	
<b>Unit Four: Mathematical Models</b>	
<b>Final Evaluation</b>	Student's attendance is mandatory. According to Growing Success, students must complete a final evaluation. Failure to complete major evaluations including final exam may result in loss of credit. As per Ministry Policy, teachers will evaluate using observations, conversations and products as well as their professional judgment to determine a grade.

**Types of Assessment: *Students are responsible for demonstrating their learning***

**Assessment as learning:** Students are actively engaged in this assessment process: that is, they monitor their own learning; use assessment feedback from teacher, self, and peers to determine next steps; and set individual learning goals. Assessment as learning requires students to have a clear understanding of the learning goals and the success criteria. Assessment as learning focuses on the role of the student as the critical connector between assessment and learning.

**Assessment for learning:** The ongoing process of gathering and interpreting evidence about student learning for the purpose of determining where students are in their learning, where they need to go, and how best to get there. The information gathered is used by teachers to provide feedback and adjust instruction and by students to focus their learning. Assessment for learning is a high-yield instructional strategy that takes place while the student is still learning and serves to promote learning.

**Assessment of learning:** The process of collecting and interpreting evidence for the purpose of summarizing learning at a given point in time, to make judgments about the quality of student learning on the basis of established criteria, and to assign a value to represent that quality. The information gathered may be used to communicate the student's achievement to parents, other teachers, students themselves, and others. It occurs at or near the end of a cycle of learning.

You must keep this course outline in the front of you course binder/notebook.

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Print student name

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Student Signature

\_\_\_\_\_  
Parent/Guardian Signature

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Teacher Signature and Date