

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 11	Ministry Course Code & Title	MBF3C0 – College Preparation Functions for College Mathematics	Prerequisite	MFM2P0
Ministry Course Description	<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, 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.</p>				
The Overarching Learning Goals	<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>Mathematical Models</p> <ol style="list-style-type: none"> 1) Making connections between numerical, graphical and algebraic representations of both quadratic and exponential relations arising from real-world applications in order to solve problems. 2) demonstrate an understanding of exponents, and make connections between the numeric , graphical, and algebraic representations of exponential relations ; 3) describe and represent exponential relations, and solve problems involving exponential relations arising from real-world applications. <p>Personal Finance</p> <p>Making practical comparisons of purchases using concepts of simple and compound interest; exponential growth, credit card implications and vehicle ownership and operation.</p> <p>Geometry and Trigonometry</p> <ol style="list-style-type: none"> 1) Representing and solving two and three dimensional shapes in a variety of ways arising from real-world applications. 2) Using trigonometric tools like the sine law and cosine law in acute triangles taken from real-world applications. <p>Data Management</p> <ol style="list-style-type: none"> 1) Solving problems involving one-variable data by collecting, organizing, analyzing and evaluating data. 2) Investigating probability (determine and represent) as well as potential applications (identify and interpret them). 				

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

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"	This will take place in the last 4-6 weeks for the semester. Based on ministry documents, it is the expectation that students be present for all parts of the final evolution and demonstrates their learning.

The final mark will be determined using the following achievement chart categories (with weights in brackets):

Knowledge and Understanding (35%)	Thinking and Investigation (15%)	Communication (15%)	Application (35%)
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)
Unit One: Mathematical Models	Students will write quizzes once a section of the unit has been completed in preparation for their unit test. Unit tests occur at the end of the unit and students are given at least one week notice to prepare for each unit test. Unit tests will address Knowledge and Understanding, Communication and Application achievement categories. Specialized tasks towards the end of the unit will be given to students to demonstrate their thinking skills.
Unit Two: Personal Finance	
Unit Three: Geometry and Trigonometry	
Unit Four: Data Management	
Final Evaluation	Students will have the final 4-6 weeks of the semester to create an assignment that demonstrates all the overall expectations in the course. Student's attendance is mandatory. According to Growing Success, students must complete a final evaluation. If a final evaluation is not complete credit will not be granted. 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.

Print student name

Student Signature

Parent/Guardian Signature

Teacher Signature and Date