



TFS High School
5635 Yong St. Suite 206,
Toronto, Ontario M2M 3S9
COURSE OUTLINE
Principles of Mathematics, Grade 10, Academic
MPM2D

Department	Mathematics
Instructor	Ms. Maliheh Mohseni
Developed Date	2005
Course Code	MPM2D
Credit Value	1.00
Ministry Curriculum Document	Mathematics, The Ontario Curriculum, Grades 9 and 10, 2005(Revised) http://www.edu.gov.on.ca/eng/curriculum/secondary/math9_10curr.pdf http://www.edu.gov.on.ca/eng/policyfunding/growsuccess.pdf
Prerequisites	MTH1W
Course Revision Date (TFS)	Aug 2023

Course Description:

This course enables students to broaden their understanding of relationships and extend their problem-solving and algebraic skills through investigation, the effective use of technology, and abstract reasoning. Students will explore quadratic relations and their applications; solve and apply linear systems; verify properties of geometric figures using analytic geometry; and investigate the trigonometry of right and acute triangles. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Units of Study

Unit Titles and Descriptions	Time and Sequence
<p>Linear Systems Linear relationships are not only important to understand for everyday use - understanding the interplay between distance and time for the calculation of speed, or rates of change in business, for example. Linear relationships are also fundamental to more complex forms of mathematics. This unit reviews the concepts of linear algebra that were developed in Grade 9 and expands upon important procedures such as rearranging equations and developing accurate graphs.</p>	16 hours
<p>Analytical Geometry Expanding upon the foundation built in the last unit, the equations of lines and line segments will be examined. Developing logical and mathematical methods for determining line segment length and midpoint, based upon an equation or upon coordinates, will enable a deeper study of geometric shapes and properties.</p>	16 hours
<p>Algebraic Skills To progress beyond a certain point in any mathematics, some rather advanced algebraic skills must first be mastered. In this unit, students will consider various operations on monomials, binomials and polynomials. Factoring of binomials and trinomials will be studied.</p>	16 hours
<p>Quadratic Functions Until this point, all algebraic relations that have been considered have been linear. In this unit, second-order functions are introduced. The concept of the function will be studied; the domain, range and simple transformations of quadratic functions will be explored; and students will learn how to complete the square.</p>	16 hours
<p>Quadratic Equations Having explored quadratic functions graphically, the algebra of quadratic equations will be considered. The Quadratic Formula, which will be used extensively throughout all future math courses, will be derived and used.</p>	22 hours
<p>Trigonometry Triangles have a particularly significant role to play in mathematics. This unit is all about triangles and how they can be used to describe many phenomena in the universe. A review of Pythagorean Theorem will start the discussion, which will lead the student through sine, cosine and tangent ratios, the sine law and cosine law, and the ability to solve problems using these tools.</p>	22 hours
Final Assessment	
<p>Exam This is a proctored exam worth 30% of your final grade.</p>	2 hours
Total	110 hours

Overall Curriculum Expectations

A. Quadratic Relations of the Form $y = ax^2 + bx + c$	
A1	determine the basic properties of quadratic relations;
A2	relate transformations of the graph of $y = x^2$ to the algebraic representation $y = a(x - h)^2 + k$;
A3	solve quadratic equations and interpret the solutions with respect to the corresponding relations;
A4	solve problems involving quadratic relations.
B. Analytic Geometry	
B1	model and solve problems involving the intersection of two straight lines;
B2	solve problems using analytic geometry involving properties of lines and line segments;
B3	verify geometric properties of triangles and quadrilaterals, using analytic geometry.
C. Trigonometry	
C1	use their knowledge of ratio and proportion to investigate similar triangles and solve problems related to similarity;
C2	solve problems involving right triangles, using the primary trigonometric ratios and the Pythagorean theorem;
C3	solve problems involving acute triangles, using the sine law and the cosine law.

Teaching / Learning Strategies:

As in a conventional classroom, instructors employ a range of strategies for teaching a course:

- Clear writing that connects mathematics to relevant situational problems
- Examples of full solutions in various contexts and opportunities to practice
- Direct instruction and coaching on student work by the teacher

In addition, teachers and students have at their disposal a number of tools that are unique to electronic learning environments:

- Electronic simulation activities
- Video presentations
- Discussion boards and email
- Assessments with real-time feedback
- Interactive activities that engage both the student and teacher in the subject
- Peer review and assessment
- Internet Instructional Videos

All course material is online, no textbook is required. Assignments are submitted electronically. Tests are completed online at a time convenient for the student, and the course ends in a final exam which the student writes at a predetermined time and place. which the student writes under the supervision at a predetermined time and place.

The final mark and report card are then forwarded to the student's home

school. Students must achieve the Ministry of Education learning expectations of a course and complete 110 hours of planned learning activities, both online and offline, in order to earn a course credit. Students must keep a learning log throughout their course which outlines the activities they have completed and their total learning hours. This log must be submitted before the final exam can be written.

The chart below indicates some general examples of online and offline activities.

ONLINE LEARNING ACTIVITIES	OFFLINE LEARNING ACTIVITIES
WATCHING INSTRUCTIONAL VIDEOS COURSE	READING MATERIALS FOR
WATCHING ADDITIONAL RESOURCES VIDEOS	STUDYING INSTRUCTIONAL
COMPLETING ONLINE TIMED ASSIGNMENTS	PRACTICING SKILL
CONTRIBUTING TO FORUMS	COMPLETING ASSIGNMENTS
UPLOADING VIDEO PRESENTATIONS	COMPLETING ESSAY
COMMUNICATING WITH INSTRUCTOR	PREPARING PRESENTATIONS
PARTICIPATING IN LIVE CONFERENCES EXAMS	REVIEWING FOR TESTS AND
PRACTICING THROUGH ONLINE QUIZZES INTERNET	RESEARCHING TOPICS ON
REVIEWING PEER SUBMISSIONS	
ASSESSING PEER PRESENTATIONS	
COMPLETING ONLINE TIMED EXAM	

Students are expected to access and participate actively in course work and course forums on a regular and frequent basis. This interaction with other students is a major component of this course and there are minimum requirements for student communication and contribution. Seven mathematical processes will form the heart of the teaching and learning strategies used.

1. Communicating: To improve student success there will be several opportunities for students to share their understanding both in oral as well as written form.
2. Problem solving: Scaffolding of knowledge, detecting patterns, making and justifying conjectures, guiding students as they apply their chosen strategy, directing students to use multiple strategies to solve the same problem, when appropriate, recognizing, encouraging, and applauding perseverance, discussing the relative merits of different strategies for specific types of problems.
3. Reasoning and proving: Asking questions that get students to hypothesize, providing students with one or more numerical examples that parallel these with the generalization and describing their thinking in more detail.
4. Reflecting: Modeling the reflective process, asking students how they know.

5. **Selecting Tools and Computational Strategies:** Modeling the use of tools and having students use technology to help solve problems.

6. **Connecting:** Activating prior knowledge when introducing a new concept in order to make a smooth connection between previous learning and new concepts, and introducing skills in context to make connections between particular manipulations and problems that require them.

7. **Representing:** Modeling various ways to demonstrate understanding, posing questions that require students to use different representations as they are working at each level of conceptual development - concrete, visual or symbolic, allowing individual students the time they need to solidify their understanding at each conceptual stage.

Assessment and Evaluation

Toronto eLearning School's approach to assessment and evaluation is based on the Ontario Ministry of Education's Growing Success 2010 document. Assessment is the process of gathering information that accurately reflects how well a student is achieving the curriculum expectations in a subject or course.

The primary purpose of assessment is to improve student learning. Assessment for this purpose is seen as both "assessment for learning" and "assessment as learning". As part of assessment for learning, teachers provide students with descriptive feedback and coaching for improvement. Teachers engage in assessment as learning by helping all students develop their capacity to be independent, autonomous learners who are able to set individual goals, monitor their own progress, determine next steps, and reflect on their thinking and learning. TES teachers use evidence from a variety of sources in their assessment. These include formal and informal observations, discussions, conversations, questioning, assignments, projects, portfolios, self-assessments, self-reflections, essays, and tests.

Assessment occurs concurrently and seamlessly with instruction. Our courses contain multiple opportunities for students to obtain information about their progress and achievement, and to receive feedback that will help them improve their learning. Students can monitor their own success through the tracking of learning goals and success criteria throughout all courses.

Summative "assessment of learning" activities occur at or near the end of periods of learning. Evidence of student achievement for evaluation is also collected over time from different sources, such as discussions, conversations and observation of the development of the student's learning. Using multiple sources of evidence increases the reliability and validity of this evaluation. The evaluations are expressed as a percentage based upon the levels of achievement.

Strategies for Assessment and Evaluation of Student Performance

Assessment as Learning In all Units students can complete an online practice quiz on each lesson that tests their knowledge of facts and definitions. The quiz can be retaken as many times as needed and only the highest score is recorded. Students discover their areas of weakness and can take steps to improve on them. The student and instructor can then have a conversation on how best to assist the student's learning.

A Mid-Unit Assignment asks students to videotape themselves presenting solutions to various problems, or results of research, and post them to the forum for review by the instructor and selected peers. These comments and observations can be used to help the student assess their own listening and communicating skills, as well as their progress through the course. Feedback from both the instructor and the student can help the student advocate for their own learning.

Instructors communicate with their students through email or live chat sessions. Students can raise concerns and reflect on their own personal goals and learning during these one to one conversations with their instructors

Assessment for Learning In all Units, students are expected to submit a mid-unit assignment directly fundamental to the instructor. The assignment provides a number of questions, problems, and activities balanced around the four categories of the Achievement Chart: Knowledge and Understanding, Thinking, Application, and Communication. The instructor grades each assignment and provides descriptive feedback and the student is asked to provide feedback on the feedback.

Mid-Unit Video Presentation Assignments are used by the instructor as a form of diagnostic and formative assessment to help adjust instruction based on the needs of the student. It is another way the instructor gathers evidence for evaluating student performance. At the end of each Unit, students complete an online test of the material. A grade is recorded and the instructor can initiate a conversation with the student if there are concerns. Instructors communicate with their students through email or live chat sessions. Students can raise concerns and reflect on their own personal goals and learning during these one to one conversations with their instructors.

Occasionally instructors ask a student to post a solution to a unique problem designed for that student to the discussion forum, or to comment on the posting of another student. These activities become part of the student's grade under the category "Online Collaboration" and provide an opportunity for the instructor to provide feedback to the student.

Assessment of Learning Each Unit ends with an assignment that is submitted directly to the instructor. A grade is recorded based on the Learning Goals and Success Criteria for that Unit. Students may be asked to resubmit parts of the assignment, or a modified assignment

. At the end of each Unit, students complete an online test of the material. A grade is recorded and the instructor can initiate a conversation with the student if there are concerns.

At the end of the course, students complete a final exam that covers all the material studied in the course.

Example of an Assessment Rubric for an Assignment in this course

MPM2D Unit 2 Assignment 1: Review of Functions, Domain and Range

Learning Goals				
<ul style="list-style-type: none"> I will be able to identify transformations and state the domain and range of functions I will be able to use correct mathematical form to communicate my understanding 				
Success Criteria	Level			
	1	2	3	4
I can state domain and range of degree one functions				
I can state domain and range of degree 2 functions				
I can state domain and range of square root functions				
I can state domain and range of rational functions				
I can generate inverse function for polynomial functions				
I can generate inverse functions for rational functions				
I can state vertical shifts and stretches for various functions				
I can state horizontal shifts and stretches for various functions				
I can state reflections in both axes for various functions				
I can use correct and appropriate mathematical notation				
I can label axes appropriately				
I can sketch graphs that are neat, complete and legible				
I can communicate using correct mathematical terminology				

I can present solutions in logical and sequential form				
Teacher Feedback:				
Student Feedback:				

Name:

MPM2D

chapter 1 linear relations

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding	Identify given concepts with limited knowledge and understanding	Identify given concepts with some knowledge and understanding ✓	Identify given concepts with considerable knowledge and understanding	Identify given concepts with thorough knowledge and understanding
	Solve problems that arise from realistic situations described in words or represented by linear systems of two equations involving two variables, by choosing an appropriate algebraic or graphical method with limited knowledge and understanding	Solve problems that arise from realistic situations described in words or represented by linear systems of two equations involving two variables, by choosing an appropriate algebraic or graphical method with some knowledge and understanding ✓	Solve problems that arise from realistic situations described in words or represented by linear systems of two equations involving two variables, by choosing an appropriate algebraic or graphical method with considerable knowledge and understanding	Solve problems that arise from realistic situations described in words or represented by linear systems of two equations involving two variables, by choosing an appropriate algebraic or graphical method with thorough knowledge and understanding
	Solve systems of two linear equations involving two variables, using the algebraic method of substitution or elimination with	Solve systems of two linear equations involving two variables, using the algebraic method of substitution or elimination with some	Solve systems of two linear equations involving two variables, using the algebraic method of substitution or elimination with considerable	Solve systems of two linear equations involving two variables, using the algebraic method of substitution or elimination with thorough

	limited knowledge and understanding	knowledge and understanding ✓	knowledge and understanding	knowledge and understanding
Thinking	Collect data that can be represented as a line relation with limited thinking	Collect data that can be represented as a line relation with some thinking ✓	Collect data that can be represented as a line relation with considerable thinking	Collect data that can be represented as a line relation with thorough thinking
Communication	Compare given aspects for validity with limited communication	Compare given aspects for validity ✓ with some communication	Compare given aspects for validity with considerable communication	Compare given aspects for validity with thorough communication
	Compare given aspects of problem under study with limited communication	Compare given aspects of problem under study with some communication ✓	Compare given aspects of problem under study with considerable communication	Compare given aspects of problem under study with thorough communication
Application	Currently unavailable			

[*Growing Success*](#) articulates the vision the Ministry has for the purpose and structure of assessment and evaluation techniques. There are seven fundamental principles that ensure best practices and procedures of assessment and evaluation by Torontoeschool teachers.

Assessment and evaluations:

1. are fair, transparent, and equitable for all students;
2. support all students, including those with special education needs, those who are learning the language of instruction (English or French), and those who are First Nation, Metis, or Inuit;
3. are carefully planned to relate to the curriculum expectations and learning goals and, as much as possible, to the interests, learning styles and preferences, needs, and experiences of all students;
4. are communicated clearly to students and parents at the beginning of the school year or course and at other appropriate points throughout the school year or course;
5. are ongoing, varied in nature, and administered over a period of time to provide multiple opportunities for students to demonstrate the full range of their learning;
6. provide ongoing descriptive feedback that is clear, specific, meaningful, and timely to support improved learning and achievement
7. develop students' self-assessment skills to enable them to assess their own learning, set specific goals, and plan next steps for their learning.

The Final Grade

The evaluation for this course is based on the student's achievement of curriculum expectations and the demonstrated skills required for effective learning. The percentage grade represents the quality of the student's overall achievement of the expectations for the course and reflects the corresponding level of achievement as described in the achievement chart for the discipline. A credit is granted and recorded for this course if the student's grade is 50% or higher. The final grade for this course will be determined as follows:

- 70% of the grade will be based upon evaluations conducted throughout the course. This portion of the grade will reflect the student's most consistent level of achievement throughout the course, although special consideration will be given to more recent evidence of achievement.
- 30% of the grade will be based on a final exam administered at the end of the course.

Assessment and Evaluation Strategies of Student Performance based on Growing Success

Strategy	Purpose	Who	Assessment Tool
Self Assessment Quizzes	Diagnostic	Self/Teacher	Marking scheme
Problem Solving	Diagnostic	Self/Peer/Teacher	Marking scheme
Graphing Application	Diagnostic	Self	Anecdotal records
Problem Solving	Assessment	Peer/teacher	Marking scheme
Research	Assessment	Peer/teacher	Anecdotal records
Problem Solving	Evaluation	Teacher	Marking scheme
Graphing	Evaluation	Teacher	Checklist
Investigations	Evaluation	Teacher	Checklist
Unit Tests	Evaluation	Teacher	Marking scheme
Final Exam	Evaluation	Teacher	Checklist

Percentage of Final Mark	Weight	Evaluation Categories	Assessment will be ongoing to inform the students of their performance and the opportunity for success. Four achievement categories are illustrated in the chart.
70%	60%	Tests and Quizzes	
	10%	Projects and Assignments	
30%	30%	Final Written Examination	
			Inquiry 25%
			Communication 25%
			Application 25%

The Report Card

Two official report cards are issued - midterm and final. Each report card will focus on two distinct but related aspects of student achievement. First, the achievement of curriculum expectations is reported as a percentage grade. Additionally, the course median is reported as a percentage. The teacher will also provide written comments concerning the student's strengths, areas for improvement and next steps. Second, the learning skills are reported as a letter grade, representing one of four levels of accomplishment. The report cards contain separate sections for the reporting of these two aspects. The report card also indicates whether an OSSD credit has been earned.

Achievement Chart: Mathematics, Grades 9-12

Categories	50-59% (Level 1)	60-69% (Level 2)	70-79% (Level 3)	80-100% (Level 4)
Knowledge and Understanding - Subject-specific content acquired in each course (knowledge), and the comprehension of its meaning and significance (understanding)				
	The student:			

Knowledge of content (e.g., facts, terms, procedural skills, use of tools)	demonstrates limited knowledge of content	demonstrates some knowledge of content	demonstrates considerable knowledge of content	demonstrates thorough knowledge of content
Understanding of mathematical concepts	demonstrates limited understanding of content	demonstrates some understanding of content	demonstrates considerable understanding of content	demonstrates thorough and insightful understanding of content
Thinking - The use of critical and creative thinking skills and/or processes				
	The student:			
Use of planning skills -understanding the problem (e.g., formulating and interpreting the problem, making conjectures) -making a plan for problem solving	uses planning skills with limited effectiveness	uses planning skills with moderate effectiveness	uses planning skills with considerable effectiveness	uses planning skills with a high degree of effectiveness
Use of processing skills -carrying out a plan (e.g., collecting data, questioning, testing, revising, modelling, solving, inferring, forming conclusions) -looking back at the solution (e.g., evaluating reasonableness, making convincing arguments, reasoning, justifying, proving, reflecting)	uses processing skills with limited effectiveness	uses processing skills with some effectiveness	uses processing skills with considerable effectiveness	uses processing skills with a high degree of effectiveness
Use of critical/creative thinking processes (e.g., problem solving, inquiry)	uses critical / creative thinking processes with limited effectiveness	uses critical / creative thinking processes with some effectiveness	uses critical / creative thinking processes with considerable effectiveness	uses critical / creative thinking processes with a high degree of effectiveness
Communication - The conveying of meaning through various forms				
	The student:			
Expression and organization of ideas and mathematical thinking (e.g., clarity of expression, logical organization), using oral, visual, and written forms (e.g., pictorial, graphic, dynamic, numeric, algebraic forms; concrete materials)	expresses and organizes mathematical thinking with limited effectiveness	expresses and organizes mathematical thinking with some effectiveness	expresses and organizes mathematical thinking with considerable effectiveness	expresses and organizes mathematical thinking with a high degree of effectiveness
Communication for different audiences (e.g., peers and teachers) and purposes (e.g.,	communicates for different audiences and purposes with	communicates for different audiences	communicates for different audiences and purposes with	communicates for different audiences and purposes with a

to present data, justify a solution, express a mathematical argument) in oral, visual, and written forms	limited effectiveness	and purposes with some effectiveness	considerable effectiveness	high degree of effectiveness
Use of conventions, vocabulary, and terminology of the discipline (e.g., terms, symbols) in oral, visual, and written forms	uses conventions, vocabulary, and terminology of the discipline with limited effectiveness	uses conventions, vocabulary, and terminology of the discipline with some effectiveness	uses conventions, vocabulary, and terminology of the discipline with considerable effectiveness	uses conventions, vocabulary, and terminology of the discipline with a high degree of effectiveness
Application - The use of knowledge and skills to make connections within and between various contexts				
	The student:			
Application of knowledge and skills in familiar contexts	applies knowledge and skills in familiar contexts with limited effectiveness	applies knowledge and skills in familiar contexts with some effectiveness	applies knowledge and skills in familiar contexts with considerable effectiveness	applies knowledge and skills in familiar contexts with a high degree of effectiveness
Transfer of knowledge and skills to new contexts	transfers knowledge and skills to new contexts with limited effectiveness	transfers knowledge and skills to new contexts with some effectiveness	transfers knowledge and skills to new contexts with considerable effectiveness	transfers knowledge and skills to new contexts with a high degree of effectiveness
Making connections within and between various contexts (e.g., connections between concepts, representations, and forms within mathematics; connections involving use of prior knowledge and experience; connections between mathematics, other disciplines, and the real world))	makes connections within and between various contexts with limited effectiveness	makes connections within and between various contexts with some effectiveness	makes connections within and between various contexts with considerable effectiveness	makes connections within and between various contexts with a high degree of effectiveness

Learning Skills:

Learning Skills are skills and habits are essential to success in school and in the workplace. Teachers report achievement on the six Learning Skills in the table below using letter codes:

E = Excellent

G = Good

S = Satisfactory

N = Needs Improvement.

Learning Skills	Sample Behaviors
Responsibility	The student fulfils responsibilities and commitments within the learning environment; completes and submits class work, homework, and assignments according to agreed-upon timelines; takes responsibility for and manages own behavior.

Organization	The student devises and follows a plan and process for completing work and tasks; establishes priorities and manages time to complete tasks and achieve goals; identifies, gathers, evaluates, and uses information, technology, and resources to complete tasks.
Independent Work	The student independently monitors, assesses, and revises plans to complete tasks and meet goals; uses class time appropriately to complete tasks; follows instructions with minimal supervision.
Collaboration	The student accepts various roles and an equitable share of work in a group; responds positively to the ideas, opinions, values, and traditions of others; builds healthy peer-to-peer relationships through personal and media-assisted interactions; works with others to resolve conflicts and build consensus to achieve group goals; shares information, resources, and expertise and promotes critical thinking to solve problems and make decisions.
Initiative	The student looks for and acts on new ideas and opportunities for learning; demonstrates the capacity for innovation and a willingness to take risks; demonstrates curiosity and interest in learning; approaches new tasks with a positive attitude; recognizes and advocates appropriately for the rights of self and others.
Self-Regulation	The student sets own individual goals and monitors progress towards achieving them; seeks clarification or assistance when needed; assesses and reflects critically on own strengths, needs, and interests; identifies learning opportunities, choices, and strategies to meet personal needs and achieve goals; perseveres and makes an effort when responding to challenges.

Attendance Policy & Procedure

Regular attendance and punctuality contribute to student success and achievement. Attendance and punctuality are related to developing character traits such as respect, initiative, responsibility and integrity, and are linked to learning skills such as work habits and initiative. Students demonstrate commitment, respect, initiative and responsibility when they are in class and on time, all the time. The less class time students miss, the more likely they will succeed academically. Students are expected to be on time for every class. Punctuality shows respect and consideration for others. Being late for class inconveniences and disrupts your classmates and teachers.

If students choose to attend irregularly, they may not achieve a credit, we recommend that parents not withdraw their son or daughter from school except in unavoidable circumstances. Students are required to make prior arrangements with their teachers, to complete tests and assignments. Students are responsible for all missed work.

Good attendance is essential for success in school and work. Prospective employers will be interested in a student's good school attendance record. Regular attendance affects positively on your progress and the progress of the class as well.

Students are expected to be in their classes on time. If you arrive any time after start of the class, you will be marked late. If you arrive 30 minutes after the class has started, the class will be marked as "skips"/unauthorized absences. A phone call will be made to the parent/guardian, or a detention will be assigned by the office.

Appointments with doctors should be made outside of school hours, where possible. If a student needs to be excused during the day, a note or appointment card must be brought into the office. All students regardless of age are expected to follow the policy. Students who are 18 years of age or older are expected to follow the attendance procedures as outlined.

The school will contact the homes of students with unexplained absences daily. If any test or assignment is missed because of an invalid absence; the student may forfeit the right to make it up.

Attendance & Punctuality Procedure

Students, parents, and staff have a role to play in ensuring that students attend classes regularly and punctually.

Students are responsible for:

- attending all scheduled classes on time
- being prepared for classes (e.g., resources, completed work) and participating fully in the planned learning activities.

- reporting absences (when possible, in advance) and presenting proper documentation to staff.
- covering the material missed because of absences.

Parents are responsible for:

- ensuring that their child arrives at school on time and is ready for classes.
- making every effort to ensure that their child is present for classes - including arranging appointments outside of the school day, whenever possible.
- actively monitoring their child's progress – including their attendance, achievement; and
- communicating with the school and provide a note when their child will be late or absent,

Academic Honesty: Cheating and Plagiarism:

Plagiarism is a serious offense. It is defined as taking words, phrasing, sentence structure, or any other element of the expression of another person's **ideas** and using them as if they were your own. Plagiarism is a violation of another person's rights, whether the material taken is excessive or small. Students will be assisted in developing strategies and techniques to avoid plagiarism. They need to be aware that plagiarized term work will be penalized and could result in a mark of zero.

TFS work with its students to ensure that they fully understand that plagiarism and cheating is unacceptable behavior. Before every evaluation is assigned, teachers remind students, both verbally and in writing, that all student products must be original work. If a student submits plagiarised work, or cheats, it is dealt with on a case-by case basis.

If it was done accidentally or purposefully; it is a first-time offence; the grade level and maturity of the student; the reason for plagiarising/cheating, etc. Each case is different, but a student may be allowed a second chance, may receive a zero, or a repeat offender may be asked to leave TFS.

Resources required by students

- Access to MPM2D online course of study
- Access to a scanner or digital camera
- Access to a spreadsheet and word-processing software
- Access to an online graphing calculator
- Access to Youtube

Reference Texts Note: This course is entirely online and does not require or rely on any textbook.

Should students wish to seek additional information we would recommend these texts:

- Mathematics 10, McGraw-Hill Ryerson, 2008
- Mathematics 10, Nelson Education Ltd., 2009