## 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/<br>Grade                    | Math – Grade 9   | Ministry Course<br>Code & Title | MPM1D0 – Principles of<br>Mathematics - Academic | Prerequisite | None |
|---|--|---------------------------------|--|--------------|------|
| Ministry<br>Course<br>Description       | This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.  |                                 |  |              |      |
| The<br>Overarching<br>Learning<br>Goals | 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: Number Sense and Algebra with exponents, numerical and polynomial expressions, and first degree equations; Linear Relations of two variable relationships; Analytic Geometry of graphs and their equations; and Measurement and Geometry involving two and three dimensional shapes. |                                 |  |              |      |

**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 <u>http://www.edu.gov.on.ca/eng/</u> 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<br>Work Habits | Sample Behaviours  |  |  |  |
|------------------------------------|--|--|--|--|
| Responsibility                     | <ul> <li>completes/submits homework, and assignments according to agreed upon timelines</li> <li>takes responsibility for and manages own behaviour</li> </ul>   |  |  |  |
| Organization                       | <ul> <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> |  |  |  |
| Independent Work                   | <ul> <li>uses class time appropriately to complete tasks</li> <li>follows instruction with minimal supervision</li> </ul>  |  |  |  |
| Collaboration                      | <ul> <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>   |  |  |  |
| Initiative                         | <ul> <li>looks for and acts on new ideas and opportunities for learning</li> <li>demonstrates curiosity and interest in learning</li> </ul>  |  |  |  |
| Self-Regulation                    | <ul> <li>sets individual goals and monitors progress towards achieving them</li> <li>perseveres through challenges, and seeks clarification or assistance when needed</li> </ul>   |  |  |  |
| 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<br>of understanding of course skills and content through<br>the evaluation products listed under "Term<br>Assessments" | Summative tasks will take place in the last half of the semester.<br>Based on ministry documents, it is the expectation that<br>students be present for all parts of the final evaluation and<br>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 mispresenting student achievement.

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

| Course Units of Study  | Term Assessments (70% of the Final Mark)  |  |  |
|--|---|--|--|
| Unit One: Number<br>Sense and Algebra<br>Unit Two: Linear<br>Relationships<br>Unit Three: Analytic<br>Geometry | Students will write a quiz once each section of the chapter has been completed in preparation for<br>their chapter test. Chapter tests occur at the end of the unit and students are given advanced<br>notice to prepare for the test. Tests will address Knowledge and Understanding, Communication<br>Application and Thinking achievement categories. Assignments will be given as needed.<br>Students who are absent on the day of an evaluation for reasons such as illness, field trip or<br>suspension are responsible for meeting the teacher to make alternative arrangements to |  |  |
| Measurement and<br>Geometry  | submit/complete the evaluation.   |  |  |
| 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 in 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 <u>as</u> 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** <u>for</u> 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** <u>of</u> 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