**EAST YORK COLLEGIATE DEPARTMENT OF MATHEMATICS COURSE OUTLINE**

Date: September, February 2016, 2017

COURSE CODE: MFM 2P1

COURSE NAME: GRADE 10 APPLIED MATHEMATICS

CURRICULUM LEADER: MR. SINGH

PREREQUISITES: MFM1P OR MPM1D

TEACHER: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Course Description**

This course is built on several units. These units are

1. Linear relationships
2. Trigonometry
3. Quadratic relations
4. Geometry

The teaching of this course emphasizes an inquiry based, hands on approach. This means that students will be guided towards understanding concepts through various techniques. These techniques include working collaboratively, presentations, working with manipulatives, explaining and communicating ideas and creating journal entries. Each of the lessons in this course is built upon a three part framework emphasizing the points mentioned above. Each lesson begins with its own learning goals and ends with a consolidation to include the success criteria established by the teacher and students.

How your child’s mark is broken down.

**Course work = 70%**

Knowledge and Understanding: 50%

Communication: 10%

Application 20%

Thinking Inquiry and Problem Solving 20%

We will evaluate students through the following methods:

1. Traditional paper and pencil
2. Verbal mastery of material
3. Reciprocal teaching
4. Presentation of knowledge in a collaborative setting

Etc.

**Summative work:** 30 % [10% Culminating Activity, 20% Final Exam]

**Strand:** **Measurement and Trigonometry**

By the end of this course, students will:

 1 use their knowledge of ratio and proportion to investigate similar triangles and solve problems related to similarity

 2 solve problems involving right triangles, using the primary trigonometric ratios and the Pythagorean theorem

 3 solve problems involving the surface areas and volumes of three-dimensional figures, and use the imperial and metric systems of measurement

**Strand:** **Modeling Linear Relations**

By the end of this course, students will:

 4 manipulate and solve algebraic equations, as needed to solve problems

 5 graph a line and write the equation of a line from given information

 6 solve systems of two linear equations, and solve related problems that arise from realistic situations

**Strand:** **Quadratic Relations of the Form y = ax2 + bx + c**

By the end of this course, students will:

 7 manipulate algebraic expressions, as needed to understand quadratic relations

 8 identify characteristics of quadratic relations

 9 solve problems by interpreting graphs of quadratic relations