Foundations of Mathematics, Grade 10, Applied (MFM2P)

**Prerequisite:** Level 1 or greater in Grade 9 Academic Math, level 2 or greater in Grade 9 Applied Math

**Text Book:** Addison Wesley

**Unit 1: Functions/ Other**
- Integers, Fractions, Bedmas
- Substituting Values for Variables
- Simplifying Polynomial Expressions
- Solving Equations
- Re-arranging Equations
- Functions

**Unit 2: Co-ordinate Geometry**
- \( y = mx + b \) and Graphing
- Parallel and Perpendicular Reference
- Finding Equations Algebraically (Slope and Point, Two Points, Intercepts)
- Finding Equations from Graphs

**Unit 3: Linear System**
- Solving Systems of Equations by Graphing
- Solving Systems of Equations by Elimination
- Solving Systems of Equations by Substitution

**Unit 4: Quadratic Expressions**
- Expanding and Simplifying 2nd Degree Polynomials
- Factoring (Common, Simple Trinomials and Difference of Squares)

**Unit 5: Quadratic Functions**
- Properties of Quadratic Functions
- Graphing Using Properties
- Graphing Using Transformations
- Getting Equations from Graphs
- Maximum/Minimum (from Graph or Technology)

**Unit 6: Trigonometry**
- Proportions
- Congruence and Similarity
- Pythagoras
- Sine/Cos/Tan

**Unit 7: Measurement and Geometry**
- Conversions (Met to Imp, Imp to Met)
- Perimeter and Area
- Surface Area of Prisms, Pyramids, and Cylinders
- Volume of Prisms, Pyramids, Cylinders, Cones and Spheres
## Evaluation:

<table>
<thead>
<tr>
<th>Assessment Method</th>
<th>Knowledge/Understanding</th>
<th>Thinking/Inquiry/Problem Solving</th>
<th>Communication</th>
<th>Application</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Tests</td>
<td>20.0%</td>
<td>10.0%</td>
<td>5.0%</td>
<td>10.0%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Assignments</td>
<td>8.0%</td>
<td>5.0%</td>
<td>5.0%</td>
<td>7.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Alternate Summative</td>
<td>2.0%</td>
<td>3.0%</td>
<td>2.0%</td>
<td>3.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Exam</td>
<td>10.0%</td>
<td>2.0%</td>
<td>3.0%</td>
<td>5.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40.0%</strong></td>
<td><strong>20.0%</strong></td>
<td><strong>15.0%</strong></td>
<td><strong>25.0%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

**Test Policy:** Refer to the Banting Memorial High School Mathematics Department test Policy