

**MATH 11 FOUNDATIONS 2021/2022**

**COURSE OUTLINE**

**Suggested Completion dates**

<b>Monday September 29</b>	<b>Unit 1</b>
<b>Wednesday October 15</b>	<b>Unit 2</b>
<b>Tuesday November 2nd</b>	<b>Unit 3</b>
<b>Thursday November 18</b>	<b>Unit 4</b>
<b>Monday December 6</b>	<b>Unit 5</b>
<b>Friday January 14</b>	<b>Unit 6</b>
<b>Friday January 21</b>	<b>Final Exam / Marks Cut off</b>

## **Learning Outcomes:**

### **Measurement**

- Solve problems that involve the application of rates
- Solve problems that involve scale diagrams, using proportional reasoning
- Demonstrate an understanding of the relationships among scale factors, areas, surface areas and volumes of similar 2-D shapes and 3-D objects

### **Geometry**

- Derive proofs that involve the properties of angles and triangles
- Solve problems that involve the properties of angles and triangles
- Solve problems that involve the cosine law and the sine law

### **Logical Reasoning**

- Analyze and prove conjectures, using inductive and deductive reasoning, to solve problems
- Analyze puzzles and games that involve spatial reasoning, using problem-solving strategies

### **Statistics**

- Demonstrate an understanding of normal distribution, including standard deviation and z-scores
- Interpret statistical data using confidence intervals, confidence levels, and margin of error

### **Relations and Functions**

- Model and solve problems that involve systems of linear inequalities in two variables
- Demonstrate an understanding of the characteristics of quadratic functions including vertex, intercepts, domain and range, and axis of symmetry

## **Assessment:**

**Quiz: 20% (all quizzes are equally weighted)**

**Unit Test: 60% (all unit tests are equally weighted)**

**Final Exam: 20% (or 100%)**