# FOUNDATIONS OF MATHEMATICS 11

**COURSE OUTLINE**



**TEACHER:** Mrs. Godfrey

**TEXTBOOK:** Foundations of Mathematics 11(Nelson)

**PRE-REQUISITE COURSES:** Geometry, Measurement and Finance 10 **AND**

Number, Relations and Functions 10

**COURSE DESCRIPTION:**

This course is a pre-requisite for a second **Foundations of Mathematics** course in Grade 12, providing a pathway designed for entry into academic programs not requiring pre-calculus. It is also a pre-requisite for the pre-calculus pathway. Students develop logical reasoning skills and apply this to proofs and problems involving conjectures, angles and triangles, the sine law and the cosine law. Students model and solve problems involving systems of linear inequalities in two variables and explore characteristics of quadratic functions. Costs and benefits of renting, leasing and buying are explored and investment portfolios are analysed in terms of interest rate, rate of return and total return.

*Students have a choice of this course or* **Financial and Workplace 11***to complete graduation requirements.*

**MATERIALS REQUIRED:**

* Scientific Calculator
* Binder
* Pencil / Eraser
* Graph paper
* Ruler
* Highlighters (3 different colors)

**TOPICS:**

* Logical Reasoning (Chapter 1)
* Geometry (Chapters 2, 3 & 4)
* Relations and Functions (Chapters 5 & 6)
* Financial Applications (Chapters 8 & 9)

**EVALUATION:**

Observation/Communication 5%

Summative Evaluation 65%

Demonstration of Knowledge 30%