

## A Level in Mathematics

Location	Marple College
Course Type	College 16-18
Department	A Levels
Start Date	Monday 2nd September 2024
Course Code	MFQ-ML3L-1121

## **Course Overview**

Mathematics is about solving problems. Pure Maths provides methods involving algebra, trigonometry, functions and calculus. Applied Maths is divided into Statistics and Mechanics. Statistics is about data analysis and probability whereas Mechanics is about forces and motion of objects.

# **Course Requirements**

PLEASE NOTE - YOU MUST APPLY FOR 3 A LEVELS

Standard A Level entry requirements: 5 x GCSE grade 5's or above (must include Maths and English Language). However, certain subjects may have additional entry criteria, which can be found below:

Additional Entry Requirements: A Level Maths will require grade 6 in GCSE Maths

This subject must also be studied alongside at least one other science-based (Maths, Biology, Chemistry, Physics) course.

## What You Will Learn

Mathematics is about solving problems. Pure Maths provides methods involving algebra, trigonometry, functions and calculus. Applied Maths is divided into Statistics and Mechanics. Statistics is about data analysis and probability whereas Mechanics is about forces and motion of objects. If you enjoy Maths you should do it for its own sake! You should also choose it if compliments your application to other subjects such as Sciences, Business Studies, Economics and Psychology. How will I learn? Lessons are usually teacher led and could involve investigation, discussion, group work and working on examples. You will have your own workbook for each area of the specification. Scientific calculators are used extensively throughout the course.

#### Assessment

Pure Maths makes up two thirds of the A-level and Applied Maths makes up one third (one sixth on Mechanics and one sixth on Statistics). The final exams consist of three two-hour papers.

Paper 1: 100% Pure Paper 2: 50% Pure 50% Mechanics Paper 3: 50% Pure 50% Statistics

#### Progression

A Level Mathematics is welcomed as a qualification for a variety of Higher Education courses. A Mathematics qualification is vital for some subjects, such as Engineering, and useful for others, such as Biochemistry. Students can also go into areas such as Accountancy, Business and Finance, Computing, Economics, Engineering, Medicine, Teaching and more.

#### **Career Options**

Many Mathematics graduates work in Accountancy, Computing, Engineering, Management or Teaching.

## **Mandatory Units**

Mathematical argument, language and proofMathematical problem solving Mathematical modelling A: Proof B: Algebra and functions C: Coordinate geometry in the (x, y) plane D: Sequences and series E: Trigonometry F: Exponentials and logarithms G: Differentiation H: Integration I: Numerical methods J: Vectors K: Statistical sampling L: Data presentation and interpretation M: Probability N: Statistical distributions O: Statistical hypothesis testing P: Quantities and units in mechanics Q: Kinematics R: Forces and Newton's laws S: Moments

#### **Contact Details**

For further information please contact T: 0161 886 7070 or E: info@trafford.ac.uk

#### Disclaimer

Although every care has been taken to ensure that the information contained within this document is accurate, there may be changes to this programme and provision. We will endeavour to keep prospective and current students updated where appropriate and when the information becomes available.