

Course title: Mathematics A Level OCR

Academic year:	2025	
Course Venue:	Sir Graham Balfour High School	
Course Type:	A level	
<b>Duration:</b>	2 years	

### **Course Content:**

The new Advanced level course has compulsory content consisting of Pure Mathematics, Mechanics and Statistics. There is little variation between examination boards.

Strand	Content	Assessment Method
Pure Mathematics	Proof	Assessed in papers 1, 2 and 3
	Algebra	
	Graphs	
	Sequences	
	Trigonometry	
	Logarithms	
	Calculus	
	Vectors	
Mechanics	Kinematics	Assessed in paper 2
	Motion under gravity	
	Working with forces	
	Newton's laws	
	Simple moments	
Statistics	Working with data from a sample to	Assessed in paper 3
	make inferences about a population	
	Probability calculations	
	Binomial distribution	
	Normal distribution	
	Hypothesis testing	

Students are expected to complete a transition workbook before commencing the course. The contents of this are assessed during the first weeks of the first term.

# **Additional Information:**

Students of Mathematics will:

- Develop their understanding of mathematical principles and their interest in the subject.
- Extend their range of mathematical skills and techniques and use them in more difficult problems.
- Develop the ability to apply mathematical techniques in other subjects.
- Acquire the foundation necessary for the further study of Mathematics and other disciplines.















- Develop the ability to recognise real-life situations which can be modelled mathematically, and knowledge of the appropriate procedures to be followed in order to produce useful results.
- Recognise situations where the use of modern technology is appropriate and be confident in its application.
- Develop confidence and enthusiasm in their approach to the subject.

## **Entry requirements:**

The standard entry criteria to study in the sixth form are a 9-4 in at least seven different subjects, including English and mathematics, which would usually be at grade 4 or above.

To study other Mathematics at Advanced level you must achieve at least a grade 6 at GCSE.

#### Assessment:

The structure of assessment for OCR is for three examination papers. Paper 1 assesses Pure Mathematics, paper 2 assesses Pure Mathematics and Mechanics and paper 3 assesses Pure Mathematics and Statistics

### **Financial Information:**

All students are provided with course-based textbooks as well as free access to a dedicated subscription based website providing a vast array of support materials.

## **Future opportunities:**

Mathematics A level is essential to many scientific/engineering/financial degree courses and is seen as desirable by many others.











