

Course title: Further Mathematics A Level OCR

***Taught in enrichment time on reduced time of 3 hours per week**

Academic year:	2027
Course Venue:	Sir Graham Balfour High School
Course Type:	A level
Duration:	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	Vectors Matrices Further Calculus Polar coordinates MacLaurin Series Hyperbolic functions Complex numbers Differential equations	Assessed in papers Pure Core 1 Pure Core 2
Mechanics	Kinematics Forces and motion, friction and moments Work, energy and power Impulse and momentum Centre of mass Circular motion Hooke's law Modelling oscillations	Assessed Mechanics paper
Statistics	Discrete distributions Bivariate data Chi squared tests Conditional probability Continuous random variables Expectation algebra and the Normal distribution Confidence intervals	Assessed in Statistics paper

All papers contain 25% of the overall examination

Additional Information:

Further Mathematics is currently offered as an enrichment opportunity for three hours a week.

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.
- Acquire a greater depth and breadth of knowledge of Mathematics
- 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:

To study Further Mathematics at Advanced level you must achieve at least a grade 8 at GCSE.

Students wishing to study Further Mathematics must also study Mathematics. Further Mathematics cannot be studied as an A level on its own. It is recommended as a fourth A-Level.

Assessment:

The structure of assessment for OCR is for four examination papers. Papers 1 and 2 assess Pure Mathematics, paper 3 assesses Statistics and paper 4 assesses Mechanics

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:

Further Mathematics A level is desirable, sometimes required to study Mathematics at degree level and is desirable for many scientific/engineering/financial degree courses.