

A LEVEL AND AS MATHEMATICS & FURTHER MATHS

INTRODUCTION

In the Sixth Form we offer a modular mathematics course run by OCR/MEI. A and A/S students are taught in the same group. A modular course, with the opportunity for retakes, has given past students greater confidence in maths and an understanding of how they are progressing. However, a modular course means exams throughout the two years with a consistent approach to work.

Students study six modules, 4 of which are pure maths, 1 statistics and 1 other to be chosen from mechanics or statistics. Pure maths forms the core of the work for A level. It includes topics such as algebra, geometry, trigonometry and calculus. We try to approach the work from a practical point of view.

Mechanics deals with physical mathematics and considers forces acting on objects e.g. gravity on projectiles, circular motion and simple harmonic motion. Students have the opportunity to apply theory to practical situations. Statistics gives students the opportunity to investigate the main features of different types of data. It considers a number of distributions and the setting up and testing of hypotheses, as well as considering simple probability models. Decision maths gives students an insight into solving practical problems using various graphical and analytical techniques. Pure Mathematics, Mechanics and Statistics draw on the use of graphical calculators and computers wherever possible.

Able mathematicians should consider the possibility of taking both Maths and Further Maths, particularly those considering further study in Maths, Physics or Engineering.

1. A Level - 6 Modules
2. A/S Level Maths - 3 modules taking one year.
3. A/S Further Maths - A Level + 3 further modules
4. A Level Further Maths + A Level Maths - A Level + 6 further modules

CAREER OPPORTUNITIES

Pure Maths and Statistics is an ideal A Level for those wishing to pursue Biology, Geography, Economics or Business related courses at College or University. Pure Maths and Mechanics is an ideal A Level to study in combination with the physical sciences and would lead to a degree in mathematics or engineering. For those who have a real enjoyment of mathematics and/or are thinking about a degree in Maths, Science or Engineering the option of studying Further Maths should be explored.

ENTRY REQUIREMENTS

To study for AS or A Level Mathematics you should have obtained A*, A or B grade at GCSE. To study for AS or A Level Further Maths you should have obtained A* or A grade at GCSE.

ASSESSMENT

Exams - Module exams are taken in January and/or May/June of the Lower and Upper Sixth. Each exam is 1 hour 30 minutes. You can resit each module exam.

Coursework is an integral part of the course forming 20% of the assessment in one of the modules of the A2 course and 20% in one module of AS Further Maths.

For further information see Mr S Dixon or Mrs L Davies