



Mathematics

Units: 3

Awarding Board: Edexcel

Course Code: 9MA0

Unit Outline:

There are 3 units in Maths at A2 level; Pure 1, Pure 2 and Applied 1. P1 and P2 are Pure Mathematics units where students cover the basic ideas of calculus, coordinate geometry and vectors. The Applied Mathematics unit covers Mechanics and Statistics. The Mechanics element deals with the laws which govern the ways in which objects move, whilst the Statistics component will give a greater insight into how data and probability are used in the real world.

Assessment:

3 exams are weighted at 33⅓ total A level marks.

Further Information:

The lessons have a traditional format but as the group sizes are smaller than those for GCSE, students have a greater opportunity to contribute to class discussion. ICT will be used for some aspects of the work. Formal lessons are supported by tutorial sessions which take place twice a week.

Pure Mathematics will develop the fundamental ideas important to problem solving in the world of finance, science, engineering and medicine such as: what calculations enable us to optimise the profits in a business? How do we solve the equations needed to put a human being on the moon? What knowledge does an architect or surveyor need when planning a project such as the O2 or the new Wembley Stadium? How can probability be used to estimate the number of athletes taking steroids? How much confidence can doctors have in a test to detect carriers of a certain disease?

Students have said about Mathematics: *"Regular homework and regular feedback...I liked the structure."* And *"I chose Maths because of its excellent record for top grades."*

Mathematics lies at the heart of a great deal of human activity with important applications in many fields. It therefore combines well with many other 'A' level subjects, particularly Physics, Chemistry, Biology, Design/Technology and Business Studies.

'Destinations' of Former Students/Possible Career Links:

Physics, Pharmacy, Electrical Engineering, Human Genetics, Midwifery, Physics with Particle Physics & Cosmology, Business Studies, Physics, Astrophysics and Cosmology, Medicine, Chemistry and Mathematics, Chemistry, Mathematics, Civil Engineering, Software Engineering, Economics, Financial and Business Economics, Mathematics and its Applications.

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