

MATHEMATICS

SPECIAL COMMENT ON ENTRY REQUIREMENTS:

A minimum of a grade 7 in GCSE Mathematics is required along with 4 in English language to study A level Mathematics at Beal.

DETAILS OF COURSE:

We will be following the EDEXCEL Linear A level specifications. This course will be examined at the end of two years and will require students to sit 3 exams each 2 hours long. The ratio of Pure maths to Applied maths is 2:1 with no optional element to the applied content. All students will cover some Statistics content and some Mechanics content within their A level mathematics course.

Pure Mathematics : 2/3rd of the course

Pure mathematics is the core of advanced mathematics. It contains the algebraic and numerical methods that allow us to describe the world and nature mathematically. Study of Pure Mathematics is fundamental and builds on the GCSE knowledge of Algebra, Number and Geometry

Applied Mathematics: 1/3rd of the course

Mechanics: is the study of motion and of forces. Mathematical models are applied to the motion of projectiles, vehicles and other objects. Laws of Motion are applied to a variety of situations. Mechanics has particular application in Physics, all forms of Engineering and Technology generally.

Statistics: The collection and representation of data, using probability models to represent real situations and developing an understanding of the application of different probability distributions. The use of regression and correlation. Statistics is applied extensively in Business, Biology, Geography, Chemistry and Economics.

There is no coursework linked with any of the modules which will be offered.

QUALITIES AND COMMITMENT EXPECTED FROM STUDENTS:

The A level student must:

1. be committed to regular study;
2. be determined to overcome difficulties;
3. have the ability to work with others and independently;
4. meet deadlines for completion of work.

ASSESSMENT:

Students are regularly assessed in both Pure and Applied Mathematics throughout the course, it will be expected that a pass grade is maintained across all assessments to continue to the full A2 course at the end of the first year.

Final exams are all taken at the end of year 13.

A level Mathematics:

Mathematics is generally considered one of the most demanding at A-level. It is not a good subject to choose as "fourth" choice – the work demand will be at the very least equivalent to your other subjects and often, particularly early in the course, it is more. Students are tested regularly and are expected to attend weekly catch up classes after school if these tests are not passed with a minimum of 40%. There are rewards for doing A level

Mathematics, but they have to be earned by hard work!

THE FUTURE:

A level Mathematics, particularly when linked with other subjects, is not only a qualification for higher education but also for a variety of employment opportunities including Banking, Insurance, Stockbroking, Advertising, Engineering etc.