

AS-LEVEL MATHEMATICS

The AS-Level Mathematics Course aims to encourage students to:

- Develop their understanding of mathematics and mathematical processes in a way that promotes confidence and fosters enjoyment;
- Develop abilities to reason logically and to recognise incorrect reasoning, to generalise and to construct mathematical proofs;
- Extend their range of mathematical skills and techniques and use them in more difficult unstructured problems;
- Develop an understanding of coherence and progression in mathematics and of how different areas of mathematics can be connected;

Course content and assessment

The following equally weighted modules are covered:

Module 1: Core Pure 1 – This module extends the work you covered in GCSE Maths. Some new topics are introduced including calculus and algebraic division. You will develop the ability to produce logical and coherent work by using appropriate mathematical symbols and language.

Module 2: Core Pure 2 – This module extends the trigonometry you covered in GCSE Maths and the calculus you covered in Core Pure 1. New topics introduced are sequences and series, exponentials and logarithms.

Module 3: Statistics 1 – This module extends the concepts of probability, numerical measures and correlation and regression covered in GCSE Maths. New topics introduced are normal distributions, binomial distributions and estimation.

There is no coursework element in AS Mathematics.

Each module is assessed by a 1.5 hour examination.

Calculators are **not** allowed in the Pure Core 1 examination.

Scientific and graphics calculators are permitted in the Pure Core 2 and the Statistics 1 examinations.

Teaching and Learning

Teaching is by lectures, class problem solving sessions and individual help. Homework is set every session and students will need to complement their class and homework study with additional work outside class.

**Exam Board: AQA Syllabus:
Specification 5361**

