Course Information

Qualification: Level 3 Mathematical Studies
Exam Board: AQA
Subject Leader: Mrs C. Hattab-Reidy

Entry Requirements:

Minimum Entry Requirements:
5 x 5s
4 in English and Maths

Subject Specific Entry Requirements:
4 in GCSE Maths

Why study Core Maths?

Many of the new A-level exam specifications include an increased amount of mathematics. This often involves working with some high-level statistical and graphical ideas that are not studied at GCSE. Core Mathematics is a course that is worth the same as an AS- level, is a qualification that is recognised by universities and employers and which provides much of the mathematical and statistical background required in other A-level subjects. These subjects include Geography, Biology, Environmental Science, Business, Economics, Health and Social Care, Sociology, Computer Science, Sport, PE and Psychology. If you are studying one of these subjects and are not intending to do A-level Mathematics then Core Maths will be very helpful. It is recommended those studying Chemistry and Physics also take A-Level Mathematics, but for any who choose not to, Core Maths will also provide some support for the mathematical content in these subjects.

Alongside thestatistical or graphical elements of the course,problem solving formsa large partof the course.A large element of this involves startingwith a something real (suchas a newspaper article) and applying somemathematics to it in order to critique the content. This is fun and satisfying (and a little scarywhen we discover how many errorsthere are in the newswe see everyday!). There is also a significant focus on personal finance and understanding topics such as tax, national insurance, loans, mortgages, bank accounts and credit cards.

What can I do with Core Maths after Sixth Form?

Degree courses in the subjects mentioned above can also include a large amount of statistical work, and some universities are encouraging sixth formers to study the subject because it will help to support applications for university degree courses and will help the students during the course too. Several universities have made reduced tariff offers to students who are taking Core Maths to reflect the value that they place on the course. Many employers say they are keen to work with people who can solve problems and the work we do with real-life problem solving will help with this.

What will I study?

We offer 2 options for studying Level 3 Mathematical Studies.

Both options include:

· Material taken from GCSE maths such as percentage work and estimation; this is applied in new contexts
· Problem solving, including the use of real-life starting points
· Mathematical literacy, which involves being able to analyse statements mathematically
· Personal finance
· Using ICT

Option 1 (AQA option 2A Statistical techniques) includes:

· The normal distribution
· Probabilities and estimation
· Correlation and regression

Option 2 (AQA options 2C Graphical techniques) includes:

· Graphical methods
· Rates of change
· Exponential functions

Option 1 is recommended for those taking subjects with more statistical content such as social sciences or humanities.

Option 2 for those with more pure science focus such as Biology or Environmental Sciences.

There are 3 lessons per week across Year12 and Year13. The course is examined via two papers (no coursework), taken at the end of Year 13:

Paper 1: Problem solving and personal finance

Paper 2: Statistical techniques OR Graphical techniques