GCE A Level Mathematics

Duration:

1 Year for AS, 2 years for A level (A2). 3 examined units make up the AS level and a further 3 examined units are required for the full A level qualification

Specification:

EDXECEL Specification.
Further details are available from their website

Entry Requirements/Student Suitability:

Students are required to reach the Wadebridge Sixth Form Level 3 entry criteria. In addition they need to be at a secure GCSE grade B in order to cope with the rigours of the course. We would also highly recommend that students study Further Mathematics at GCSE (level 2).

Course Content:

AS Level
Core 1 & Core 2: Algebra and functions; coordinate geometry in the (x,y) plane; sequences and series; differentiation; integration. trigonometry; exponentials and logarithms.
Applied
This could be Mechanics, Statistics or Decision Maths, depending on the choices made by students within the group.

A2 Level
Core 3 & Core 4: Algebra and functions; trigonometry; exponentials and logarithms; differentiation; numerical methods. Coordinate geometry in the (x,y) plane; sequences and series; differentiation; integration; vectors.
Applied
This could be Mechanics, Statistics or Decision Maths, depending on the choices made by students within the group.

For further information and exemplar question papers see the exam board web site.

Methods of Study:

While studying Mathematics, students will be expected to :–
- use mathematical skills and knowledge to solve problems
- solve complicated problems by using mathematical arguments and logic, and understand and demonstrate mathematical proofs
- simplify real life situations and use mathematics to model what happens in different circumstances
- use calculator technology and other resources, including formulae booklets and statistical tables, appropriately and effectively

Teaching of GCE Mathematics is undertaken by specialist Mathematics teachers. Students will usually have different teachers according to the modules they are studying. They are strongly encouraged to seek assistance throughout the course from not only their subject teachers, but from other teachers in the department.

As part of their studies, students will be required to complete regular homework and submit written work for assessment. They will also sit topic tests and practice exams.

If students choose to re-sit exams, they will be expected to attend revision lessons and complete additional work.

There is also potential to study further modules to gain a qualification in Further Mathematics.

Progression and the Future:
Recent research from the London School of Economics shows that students who have one or more passes in mathematics are earning on average 10% more than their fellows with A levels which do not include mathematics.

AS Mathematics is valuable in supporting other subjects at A Level and degree level, especially Sciences, Geography, Psychology, Sociology and Medical courses.

A Level Mathematics is a much sought after qualification for entry to a wide variety of full-time courses in higher education. There are also many areas of employment which value it, and it is often a requirement for mathematics related vocational qualifications.

Higher Education courses and careers which require or relate to A Level Mathematics include:–
- Economics
- Medicine
- Architecture
- Engineering
- Accountancy
- Teaching
- Psychology
- Environmental Studies
- Computing
- Information and Communication Technology

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How to Apply:
The Application Process begins in February of each year. Please contact Sarah Fisher, Sixth Form Administrator, for further information or to request an application form.

sixthform@wadebridge.cornwall.sch.uk

For further information and to apply for this course:
Please contact **Sarah Fisher, Sixth Form Administrator**
sixthform@wadebridge.cornwall.sch.uk
Telephone **01208 893905** or **07807301462**