



A Level Mathematics

Exam Board: www.edexcel.org.uk

WHY ?

Maths is perfect. The Advanced Level course will show how the separate topics from GCSE come together logically to form a fascinating and elegant subject. Mathematics at A Level is also a highly respected qualification, which will complement many combinations of Sixth Form subjects. A very wide range of careers and higher education courses will require A Level Maths.

At Swanshurst Sixth Form we offer the EDEXCEL Mathematics Course.

Year 12

Pure	Topic 1: Proof Topic 2: Algebra & functions Topic 3: Coordinate geometry in the (x,y) plane Topic 4: Sequences & series Topic 5: Trigonometry Topic 6: Exponentials & logarithms Topic 7: Differentiation Topic 8: Integration Topic 9: Vectors
Stats & Mechanics	Section A: Statistics Topic 1: Statistical sampling Topic 2: Data presentation & interpretation Topic 3: Probability Topic 4: Statistical distributions Topic 5: Statistical hypothesis testing Section B: Mechanics Topic 6: Quantities and units in mechanics Topic 7: Kinematics Topic 8: Forces & Newton's laws

Year 13: 3 examined papers

Paper 1 (Pure)	Topic 1: Proof Topic 2: Algebra & functions Topic 3: Coordinate geometry in the (x,y) plane Topic 4: Sequences & series Topic 5: Trigonometry Topic 6: Exponentials & logarithms Topic 7: Differentiation Topic 8: Integration Topic 9: Vectors
Paper 2 (Pure)	Topic 1: Proof Topic 2: Algebra & functions Topic 3: Coordinate geometry in the (x,y) plane Topic 4: Sequences & series Topic 5: Trigonometry Topic 6: Differentiation Topic 7: Integration Topic 8: Numerical methods
Paper 3 (Stats & Mechanics)	Section A: Statistics Topic 1: Statistical sampling Topic 2: Data presentation & interpretation Topic 3: Probability Topic 4: Statistical distributions Topic 5: Statistical hypothesis testing Section B: Mechanics Topic 6: Quantities & units in mechanics Topic 7: Kinematics Topic 8: Forces & Newton's laws Topic 9: Moments

We Offer This Course Because:

- It develops an understanding of mathematics in a way that promotes confidence and fosters enjoyment.
- It develops abilities to reason logically and recognise incorrect reasoning, to generalise and construct mathematical proof.
- It uses mathematics as an effective means of communication.
- It develops the skills needed to use technology such as calculators and computers effectively.
- It develops an awareness of the relevance of mathematics to other fields of study, to the world of work and to society in general.

At Swanshurst Sixth Form Centre you'll find:

- A versatile, exciting and enjoyable A Level course.
- Experienced, well qualified teachers.
- A supportive learning environment.
- Small, friendly, focused teaching groups.
- Good up to date resources.
- Online programmes of work to complement independent study.
- Easy access to technology.
- Opportunities to experience Mathematics beyond the classroom.

Course Requirements

In order for students to gain most fulfilment and reward from this course entry requirements are a Grade 6 and above in GCSE Mathematics.

Progression onto A Level Mathematics will also require at least 5 GCSEs, or equivalent, at grade 4 or above. You will also have a Grade 6 in GCSE Mathematics. Student progress will be monitored by regular assessed homework and practise examinations, which means that each pupil is always aware of exactly how well they are mastering mathematics.

If you have any additional queries do not hesitate to ask.

