

Mathematics

What will I need before taking this course?

A Grade 7 or above in GCSE Mathematics. All pupils are required to attend the "Introduction to A Level Mathematics" lesson, which will take place during the Sixth Form Induction Day at the end of June 2020. All pupils are required to complete the "Head Start to A Level Maths" work book in preparation for the course.

What can I do at the end of the course?

Students studying A level Maths are widely recognised as going on to earn a higher than average salary. Career opportunities include engineering, teaching, accountancy, insurance, actuarial work and business. However, the skills developed in Maths lend themselves very well to many and varied jobs; analytical skills, problem solving skills, communication skills, etc.

Assessment and Grading

This is a two year course with all examinations at the end of the two years.

Paper 1 - 2 hours (33%)
Paper 2 - 2 hours (33%)
Paper 3 - 2 hours (33%)

What will I learn?

Paper 1

Pure Mathematics - proof, algebra and functions, coordinate geometry, sequences and series, trigonometry, exponentials and logarithms, differentiation, integration, vectors.

Paper 2

Pure Mathematics - proof, algebra and functions, coordinate geometry, sequences and series, trigonometry, exponentials and logarithms, differentiation, integration, numerical methods.

Paper 1 and Paper 2 may contain questions on any topics from the Pure Mathematics content

Paper 3

Statistics - sampling, data presentation and interpretation, probability, statistical distributions, statistical hypothesis testing.

Calculator requirements—FX991EX Classwiz

Mechanics - quantities and units, kinematics, forces and Newton's laws, moments.

How will I learn?

Lessons include theory and practice, problem solving and group work. Being able to talk through set questions and solutions with classmates is highly desirable and students should aim to be independent learners and committed to working through practice questions. A formal assessment will be completed after each chapter of work to ensure there is thorough understanding and help identify any misconceptions. You need an ability to think clearly and produce systematic solutions. The work needs to be covered at a regular and steady pace, since the topics are inter-dependent. There is some written work with Statistics but on the whole, the subject provides a good contrast to heavily essay-based subjects.

AWARDING BODY	Edexcel
CONTACT FOR FURTHER DETAILS	Mr Williams—KS5 Coordinator