

MATHEMATICS

AWARD LEVEL: HIGHER

ENTRY LEVEL

You would be expected to have attained a National 5 Mathematics pass at A or B level to access the Higher Mathematics Course. Pupils with a C Grade pass at National 5 Mathematics may be offered a place on the Higher course at the discretion of the school.

COURSE CONTENT

The course is made up of three units.

Expressions and Functions

The general aim of this Unit is to develop knowledge and skills that involve the manipulation of expressions, the use of vectors and the study of mathematical functions. The Outcomes cover aspects of algebra, geometry, and trigonometry, and also skills in mathematical reasoning and modelling.

Relationships and Calculus

The general aim of this Unit is to develop knowledge and skills that involve solving equations and to introduce both differential calculus and integral calculus. The Outcomes cover aspects of algebra, trigonometry, calculus, and skills in mathematical reasoning and modelling.

Applications

The general aim of this Unit is to develop knowledge and skills that involve geometric applications, applications of sequences and applications of calculus. The Outcomes cover aspects of algebra, geometry, calculus, and skills in mathematical reasoning and modelling.

ASSESSMENT

This course is assessed by external examination, set, and marked by the SQA. The prelim and the main examination are split over two papers. For 2022-23 Paper 1 is non-calculator, contains short and extended response questions, is 1 hour and 10 minutes in duration and is worth 60 marks. Paper 2 is 1 hour and 30 minutes in duration, is calculator allowed, contains short and extended response questions and is worth 70 marks. Topics: vectors and recurrence relations will be omitted from the final examination in May 2023. It is expected to remain like this through 2024.

Ongoing low stakes assessment takes place throughout the course.

HOMEWORK

Short pieces of homework set 2-3 times a week based on classwork. One extended homework exercise at end of each outcome. Homework notification is in class and through the student calendar.

PROGRESSION

Advanced Higher Mathematics
HNC/HND/Degree or Employment