

Mathematics - Higher

Award Received

Higher Mathematics (SCQF Level 6)

Entry Level: What do I need to do it?

Entry to this course is at the discretion of the school. However, pupils would normally be expected to have gained the appropriate level of entry qualification and attained the skills and knowledge required as follows:

- National 5, preferably with A or B pass.
- Pupils progressing from National 5 with a C pass should expect a 2 year Higher course.

Course Content: What will I learn?

Block 1

- Properties of the Straight Line
- Functions and Graphs
- Differentiation
- Mathematical modelling involving Recurrence Relations

Block 2

- Use the Factor/Remainder theorem and apply Quadratic Theory
- Integration
- Equation of the circle
- Use Trigonometric Equations and apply Trigonometric Formulae
- Trigonometric Wave Functions

Block 3

- Vectors in 3 dimensions
- Logarithmic and Exponential Functions and Equations
- Applications of Differentiation and Integration.

Teaching Methods: What will I do?

The teaching methods include:

- Class discussion
- Independent work
- Pair and group tasks
- Regular Retrieval Practice Activities
- Ongoing formative assessment

Assessment: How will I be assessed?

The course consists of 3 block assessments that are assessed at A/B and C level and a final exam. The final exam consists of two papers a non-calculator and calculator paper. The exam is externally assessed by the SQA.

Homework.

The expectation is that pupils will complete 2 hours of homework each week.

Progression in the Senior Phase.

Advanced Higher Mathematics (SCQF Level 7)