

Higher Maths Course Description

The Higher Course in Mathematics develops learners' mathematical rigour and the ability to use precise and concise mathematical language assumes a particular importance at this stage.

Candidates who complete a Higher Mathematics course successfully are expected to have a competence and a confidence in applying mathematical techniques, manipulating symbolic expressions and communicating with mathematical correctness in the solution of problems.

The course has obvious relevance for candidates with interests in fields such as commerce, engineering and science where the mathematics learned will be put to direct use.

The course is split into 3 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 also 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 also skills in mathematical reasoning and modelling.

Exam

The SQA external exam consists of 2 papers – one calculator, one non-calculator.