

MATHEMATICS

AWARD RECEIVED

National 4 Mathematics

Successful completion of your S5 Mathematics studies will allow you to attain the National 4 Mathematics qualification.

National 4 Mathematics is internally assessed pass or fail.

ENTRY LEVEL – What do I need to do it?

Minimum entry requirement is National 3 Mathematics Award.

COURSE CONTENT – What will I learn?

National 4 Mathematics

Course structure

This Course will develop skills for further learning, as well as skills for life and work. You will acquire and apply operational skills necessary for developing mathematical ideas through symbolic representation and diagrams. You will select and apply mathematical techniques and will develop your understanding of the interdependencies within mathematics. You will develop mathematical reasoning skills and will gain experience in making informed decisions.

(For more information go to: <http://www.sqa.org.uk/sqa/45751.html>)

Mathematics: Expressions and Formulae (National 4)

The general aim of this Unit is to develop skills linked to straightforward mathematical expressions and formulae. These include the manipulation of abstract terms, the simplification of expressions and the evaluation of formulae. The Outcomes cover aspects of algebra, geometry, statistics and reasoning.

Mathematics: Relationships (National 4)

The general aim of this Unit is to develop skills linked to straightforward mathematical relationships. These include solving equations, understanding graphs and working with trigonometric ratios. The Outcomes cover aspects of algebra, geometry, trigonometry, statistics and reasoning.

Numeracy (National 4)

The general aim of this Unit is to develop numerical and information handling skills to solve straightforward, real-life problems involving number, money, time and measurement. As you tackle real-life problems, you will decide what numeracy skills to use and how to apply these skills to an appropriate level of accuracy. You will also interpret graphical data and use your knowledge and understanding of probability to identify solutions to straightforward real-life problems involving money, time and measurement. You will use your solutions to make and explain decisions.

Added Value Unit (National 4)

This is the Added Value Unit of the National 4 Mathematics Course. The general aim of this Unit is to enable you to provide evidence of added value for the National 4

Mathematics Course through the successful completion of a test which will allow you to demonstrate breadth and challenge.

TEACHING METHODS – What will I do?

The National 4 Mathematics course is application based, with the work being covered in a real-life context. Teaching methods will include:

- Class discussion
- Written tasks including research
- Group work
- Role play
- Giving presentations (individual or group)

ASSESSMENT

National 4 Mathematics

You will undertake 3 unit assessments:

- Expression and Formulae
- Relationships
- Numeracy

You will also undertake the Added Value Unit Assessment. This consists of two parts:

Part 1 is made up of approximately five questions. These questions will be suitable to assess mathematical operational skills **without** the aid of a calculator. The test will have a time allocation of 20 minutes.

Part 2 is made up of approximately eight questions, four of which will require reasoning skills. In this part of the test a calculator can be used. The test will have a time allocation of 40 minutes.



HOMEWORK

You will be given regular homework. Homework will be communicated to you in class and through the Show My Homework website. Extra study will also be required at assessment times.



PROGRESSION IN THE SENIOR PHASE

Students who pass National 4 Mathematics may progress to National 5 Mathematics or to National 5 Applications of Mathematics.



COSTS This course carries no cost implication. A fee will be charged to replace any lost books or printed materials. You will be expected to bring a calculator, pen/pencil and ruler to every lesson.