NATIONAL 5 CHEMISTRY

**Course content**

Learners gain an understanding of chemistry and develop this through a variety of approaches, including practical activities, investigations and problem solving. They research topics, apply scientific skills and communicate information related to their findings, which develops skills of scientific literacy.

The course content includes the following areas of chemistry:

**1. Chemical changes and structure**

In this area, topics covered are: rates of reaction; atomic structure and bonding related to properties of materials; formulae and reacting quantities; acids and bases.

**2. Nature’s chemistry**

In this area, topics covered are: homologous series; everyday consumer products; energy from fuels.

**3. Chemistry in society**

In this area, topics covered are: metals; plastics; fertilisers; nuclear chemistry; chemical analysis.

**Skills, knowledge and understanding**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

* Demonstrating knowledge and understanding of chemistry by making accurate statements
* Demonstrating knowledge and understanding of chemistry by describing information and providing explanations and integrating knowledge
* Applying knowledge of chemistry to new situations, interpreting information and solving problems
* Planning or designing experiments to test given hypotheses or to illustrate particular effects, including safety measures
* Carrying out experimental procedures safely
* Selecting information from a variety of sources
* Presenting information appropriately in a variety of forms
* Processing information (using calculations and units, where appropriate)
* Making predictions and generalisations based on evidence/information
* Drawing valid conclusions and giving explanations supported by evidence/justification
* Evaluating experimental procedures
* Suggesting improvements to experiments/practical investigations
* Communicating findings/information

**Assessment:**

The course assessment is in 2 parts:

1. Exam paper, 2 hours 30 minutes, worth 100 marks.
2. Assignment, worth 20 marks

**Progression**

* Higher chemistry
* Other qualifications in chemistry or related areas
* Further study, employment or training