

SUBJECT: CHEMISTRY

AWARD RECEIVED: HIGHER

This course allows candidates to acquire a deeper understanding of the central concepts of chemistry. Chemists play a vital role in the production of everyday commodities. Chemistry research and development are essential for the introduction of new products.

The study of chemistry is of benefit not only to those intending to pursue a career in science, but also to those intending to work in areas such as the food, health or manufacturing industries.

Experimental and investigative approaches develop knowledge and understanding of chemical concepts, with knowledge of chemical apparatus and techniques being a key course component.

ENTRY LEVEL

Students should ideally have National 5 Chemistry, at A or B. It could be possible for a student without previous experience of Chemistry to follow this course, in which case they should speak to Mrs McDowell (Principal Teacher of Biology & Chemistry) for advice.

COURSE CONTENT

Chemical changes and structure

The topics covered are:

- ◆ periodicity
- ◆ structure and bonding
- ◆ oxidising and reducing agents

Nature's chemistry

The topics covered are:

- ◆ systematic carbon chemistry
- ◆ alcohols
- ◆ carboxylic acids
- ◆ esters
- ◆ fats and oils
- ◆ soaps, detergents and emulsions
- ◆ proteins
- ◆ oxidation of food
- ◆ fragrances
- ◆ skin care

Chemistry in society

The topics covered are:

- ◆ getting the most from reactants
- ◆ controlling the rate
- ◆ chemical energy

- ◆ equilibria
- ◆ chemical analysis

Researching chemistry

The topics covered are:

- ◆ common chemical apparatus
- ◆ general practical techniques
- ◆ reporting experimental work

ASSESSMENT

To gain an overall Award for this Course, students need to pass the:

Course Assessment components, marked by the SQA:

1. **Assignment** (represents 20% of the overall marks for the course assessment)
2. **Exam** (represents 80% of the overall marks for the course assessment)

CONDITIONS OF AWARD

Candidates' overall grades are determined by their performance across the course assessment. The course assessment is graded A-D on the basis of the total mark for all course assessment components.

HOMEWORK

Homework is an essential part of the course. Homework will include practice problems and regular revision of all the material covered in the course.

TRANSFERABLE SKILLS

There are many very useful and valuable transferable skills gained by studying Higher Chemistry, including: researching, ICT, reporting, numeracy, literacy, graphing, investigating, practical experimental skills, analysing, presentation, evaluating, to name a few.

PROGRESSION

There is very good progression from this Course on to Advanced Higher Chemistry.