CHEMISTRY (National 5)

What are the aims of this course?

Chemistry is vital to everyday life and allows us to understand and shape the world in which we live and influence its future. Chemists play a key role in meeting society's needs in areas such as medicine, energy, industry, material development, the environment and sustainability. As the importance and application of science continues to grow and develop, more trained scientists will be required. The purpose of this course is to develop learners 'curiosity, interest and enthusiasm for chemistry in a range of contexts. The key skills of scientific inquiry and investigation are integrated and developed throughout the course. The relevance of chemistry is highlighted by the study of the applications of chemistry in everyday contexts. This will enable learners to become scientifically literate citizens, able to review the science-based claims they will meet.

What will I be learning about in this course?

The course has three main units:

Chemical Changes and Structures – rates of reaction, atomic structure, bonding and acids and bases
Nature's Chemistry – fuels, cosmetics and food
Chemistry in Society – metals, fertilisers and plastics.

What skills will I develop?

The course provides opportunities for learners to become scientifically literate citizens, while developing their literacy and numeracy skills. It will also develop learners' investigative and experimental skills in a chemical context. A new focus on research skills will also lead to improvements in pupils application of ICT skills. In addition, learners will be able to develop a lifelong interest in chemistry and will recognise the impact chemistry makes on their lives, the lives of others, the environment and on society.

Through this course, they can develop relevant skills for learning, for use in everyday life and in employment. Due to the inter-disciplinary nature of the sciences, learners benefit from studying chemistry along with other science subjects, as this enhances the learner's skills, knowledge and understanding.

What learning and teaching approaches will I experience?

This course has practical and experiential learning opportunities, with a strong skills-based approach to learning, coupled with rigorous problem solving and knowledge-based learning. It takes account of the needs of all learners and learning styles and teachers will use a wide variety of teaching approaches.

How will I be assessed?

Each of the component units will be assessed by a short test..

In addition, at least one practical investigation will be written up, describing the experiment undertaken and results obtained.

The course as a whole is assessed by a 2.5 hour final examination and a research assignment.

What are the homework requirements?

In addition to reading over their notes, pupils will be expected to complete a series of questions, on a regular basis to check their knowledge and understanding.

What might this course lead to in the future?

This Course or its components may provide progression to:

- Higher Chemistry
- National 5 or Higher in another science subject
- Skills for Work Courses (SCQF level 5 or 6)
- National Certificate Group Awards
- National Progression Awards (SCQF level 5 or 6)

§ Employment