

Curricular Area: Science

Course Title: Chemistry Higher

Course Description

The study of Chemistry can make an important contribution to the student's knowledge and understanding of the physical and natural world. The course provides grounding for the further study in higher education in many areas of Science such as biological and environmental and food sciences and provides valuable background knowledge for vocational training in many areas of health and technology.

The course consists of 4 units or work:

- **Chemical Changes and Structure:** rate of a reactions, periodicity, structure & bonding
- **Researching Chemistry:** laboratory apparatus & skills
- **Natures Chemistry:** esters, fats & oils, proteins, the chemistry of cooking, the oxidation of food, soaps, detergents & emulsions, fragrances, skin care
- **Chemistry in Society:** getting the most from reactants, equilibria, chemical energy, oxidising & reducing agents, chemical analysis



Entry requirements

National 5 Chemistry, grade A or B

Presentation level

Students may be either presented for the 3 units at SCQF level 6 or for the final exam at Higher level.

Assessment

Students who are working towards achieving SCQF level 6 Chemistry will sit Key Area assessments, testing their ability to recall knowledge related to key areas of content and successfully perform solving problem skills.

Students who are working towards passing the final Higher Chemistry exam will sit more demanding assessments with questions that test the application of their knowledge to new situations. All students will be applying skills of scientific enquiry throughout the course.

There is an Assignment (worth 20% of the final mark) and an exam, both of which are externally marked. During the Assignment, students will carry out an experiment and do some research into a relevant topic in Chemistry and compare their results to published data on the same theme. The student then present their findings in a written report The majority of the marks will be awarded for applying scientific inquiry and analytical thinking skills. There will also be a prelim exam.

Home Study Expectations

Students are issued with home study every week. Home Study tasks will vary and could include research, consolidation of learning, practicing data handling skills or extended pieces of writing. Students will be also be expected to spend 60 minutes each week reading over their notes.

Possible next level of study

Higher Chemistry  Advanced Higher Chemistry

Wider Achievement Opportunities

Students have many opportunities to explore and develop their investigative and practical skills in Chemistry. The ability to write extended pieces of text to express scientific ideas and knowledge are also developed. Numeracy skills are consolidated.

Possible career path

The study of Chemistry at this level provides a good grounding for many careers. Chemists transform the everyday materials around us into something new. Other possibilities include discovering new medicines, environmental protection, forensic science, researcher, education, Science advisors for politics and policy makers, consultants on economic impact of chemical issues, fragrance chemist, Science writing and communication, art: illustrations in Chemistry textbooks, magazines and many more.

For more information see <http://www.rsc.org/learn-chemistry/collections/faces-of-chemistry/careers-with-chemistry>