

CHEMISTRY: ADVANCED HIGHER



3 units: Inorganic and Physical Chemistry
Organic Chemistry and Instrumental Analysis
Researching Chemistry

Access: Recommended A or B at Higher Chemistry

Skills

Learners will be able to:

- develop a critical understanding of the role of chemistry in scientific issues & relevant applications, including the impact these could make on the environment/society
- extend & apply knowledge, understanding & skills of chemistry
- develop & apply the skills to carry out complex practical scientific activities, including the use of risk assessments, technology, equipment & materials
- develop & apply scientific inquiry & investigative skills, including planning & experimental design
- develop & apply analytical thinking skills, including critical evaluation of experimental procedures in a chemistry context
- extend & apply problem solving skills in a chemistry context
- further develop an understanding of scientific literacy, using a wide range of resources, in order to communicate complex ideas & issues & to make scientifically informed choices
- extend & apply skills of independent/autonomous working in chemistry

Opportunities for Learners

- The Course gives opportunities for learners to develop the ability to think analytically, creatively and independently, and to make reasoned evaluations.
- Learners' creativity will be developed and encouraged through opportunities to generate new ideas when planning and designing investigations and experiments, which they will carry out.
- The key skills of scientific inquiry and investigation are integrated and developed throughout the Course. The Units offer opportunities for collaborative and independent learning, set within familiar and unfamiliar contexts.
- Practical investigative skills are particularly important at this level, reflected in the opportunity to carry out high-quality experimental work within all the Course Units and particularly in the *Researching Chemistry* Unit, which incorporates both practical techniques and skills of scientific investigation.

Assessment

To gain Advanced Higher Chemistry learners must pass the three Units, Project and Question Paper.

- Units are assessed as pass or fail by the school/centre and are quality assured by the SQA.
- The Course Assessment consists of a Project (30 marks) and a Question Paper (exam for 100 marks) which is in two sections (see below). These are marked externally by the SQA
- Advanced Higher Chemistry is graded from A to D or as No Award.

Question Paper (100 marks) - 2 hours 30 minutes

- Section 1: Multiple choice questions (20 marks)
- Section 2: restricted and extended response questions (80 marks)

Project - This project is:

- carried out independently by the learner, set by centres within SQA guidelines and conducted under some supervision and control
- The production of evidence for the project will be conducted in time to meet a submission date set by SQA
- Evidence will be submitted to SQA for external marking.