Chemistry

Higher

Recommended Entry Requirements



Progression through Chemistry



A pass at Advanced Higher leads to study at higher education in Chemistry or a related subject.



Course Content

Chemical changes and structure

- periodicity
- structure and bonding
- oxidising and reducing agents

Nature's chemistry

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

Chemistry in society

- getting the most from reactants
- controlling the rate
- chemical energy
- equilibria
- chemical analysis

Researching chemistry

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

Skills Developed

- demonstrating knowledge and understanding of chemistry by making accurate statements
- demonstrating knowledge and understanding of chemistry by describing information, providing explanations and integrating knowledge
- applying knowledge of chemistry to new situations, analysing information and solving problems
- planning, designing and safely carrying out experiments/practical investigations to test given hypotheses or to illustrate particular effects
- carrying out experiments/practical investigation safely, recording detailed observations and collecting data
- 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 from evidence/information
- drawing valid conclusions and giving explanations supported by evidence/justification
- evaluating experiments/practical investigations and suggesting improvements
- communicating findings/information effectively

Assessment

Exam Paper 3 hours in total, 80%

Project 20%

Related Careers

A qualification in Chemistry can lead to careers in medicine, pharmacy, scientific research, environmental protection, engineering and scientific manufacturing (e.g. fragrances, cosmetics).

Cindy Crawford, Margaret Thatcher, Dennis Bergkamp and Angela Merkel all have degrees relating to Chemistry!







