

Chemistry

Course content

Chemistry is the study of the properties and reactions of materials. It is sometimes called a central science, because it links the other sciences to each other, such as biology, physics, geology and environmental science.

The A level Chemistry Course is a two-year course gained by completing modules in 3 larger sections combined with the practical endorsement. The practical endorsement is an assessment of a student's skills and competency when completing core practicals.

The following topics are studied during A level chemistry:

Year 12

Physical Chemistry – atomic structure, bonding, energetic, kinetics, chemical equilibrium

Inorganic Chemistry – periodicity, group 2 the alkaline earth metals and group 7 (17) the halogens

Organic Chemistry – Alkanes, haloalkanes, alkenes, alcohols, organic analysis

Year 13

Physical Chemistry 2 - Thermodynamics, kinetics, equilibrium constant, electrode potentials, acids, bases & buffers

Inorganic Chemistry 2 - Periodicity, transition metals, reactions of inorganic compounds in aqueous solutions

Organic Chemistry 2 - Isomerism, carbonyl groups, aromatic chemistry, amines, polymerisation, amino acids, proteins & DNA, organic synthesis, chromatography

Entry requirements

Grade 5 in GCSE English and Grade 6 in GCSE Chemistry and Maths

Assessment

1. **Paper 1** – 2 hours (written paper) – 105 marks - 35% of A-level
2. **Paper 2** – 2 hours (written paper) – 105 marks - 35% of A - level
3. **Paper 3** – 2 hours (written paper) – 90 marks – 30% of A – level

Progression

A-level Chemistry is a stepping-stone to future study. Having a chemical science qualification is desirable and valuable to future employers as it provides you with a wide range of transferable skills. It gives you a vast choice in a wide range of careers such as Research and Development, Production, Marketing and Sales, Veterinary Science, Forensic Science, Marine Science, Management and Marketing, Patent Agent, Environmental, Finance, and Sales and Advertising.