

**Subject:
Chemistry**

A Level

Exam Board: AQA



Overview:

Chemistry is a very powerful subject held in high regard by universities, colleges and employers. It is a universal language used to explain and develop the world in which we all live, from an atomic to a global scale and is found at the core of many modern developments and inventions. Lessons are a mixture of teacher led lessons / discussions, presentations and research.

There is a strong practical element, with knowledge of experimental techniques being assessed within the written exam papers and also leading to the practical endorsement qualification.

The course covers three topic areas:

Topic 1: Physical Chemistry: (Atomic structure, bonding, energetics, reaction kinetics, thermodynamics, rate equations, equilibrium constants, electrode potentials and acids and bases).

Topic 2: Inorganic Chemistry: (Trends in periodic table especially those of Period 3, Group 2 and Group 7 elements, Transition metals and the reactions of ions in aqueous solution).

Topic 3: Organic Chemistry: (Nomenclature, Alkanes, alkenes, halogenoalkanes, alcohols, optical isomerism, carbonyl compounds, aromatic chemistry, polymers, amino acids, spectroscopy and organic synthesis).

Assessment:

(A Level) - 2 year course - students are assessed by examination at the end of year 13

Paper 1

- Inorganic and Physical Chemistry
- 35% of A Level (2 hours, 105 marks from short and long answer questions).

Paper 2

- Organic and Physical Chemistry
- 35% of A Level (2 hours, 105 marks from short and long answer questions).

Paper 3

- Synoptic and practical skills
- 30% of A Level (2 hours, 90 marks from questions on practical techniques and data analysis, content from any of the course and 30 marks of multiple choice questions).

Why should I study this subject at Swanwick Hall School?

Chemistry is essential for anyone wishing to study medicine or veterinary science as well as a wide range of other science degrees including pharmacy, dentistry and forensics. In recent years Swanwick Hall students have secured places on courses at UCL, Nottingham and Edinburgh Universities for Medicine and Veterinary Science plus Medicine and Natural Sciences at Oxford and Cambridge. The Chemistry team are all very experienced A level teachers with up to 26 years of teaching at this level. In addition to lessons there is the opportunity for some students to take part in the Royal Society of Chemistry's Schools Analyst Competition or to participate in the RSC's Chemistry Olympiad as well as studying spectroscopy in a university laboratory.