Carshalton Boys A level

Chemistry

Chemistry is all around us; from the reactions in our body, to the production of food and the clothes we wear. A Level Chemistry offers pupils an opportunity to investigate the properties of chemicals and see how they interact/react. Students will develop an understanding of the key concepts that underpin many biological, industrial, chemical and topical environmental processes that are key to understanding how humans impact their environment.

Students will advance their GCSE understanding and develop new insights into how our world works at a molecular level. New concepts at A level are: the chemistry of carbon and proteins (vital for all life processes) and energy changes which drive all chemical reactions.

The development of analytical skills is key to this course as well as improving exam writing skills. Good mathematical skills, especially algebra, are vital as there is a lot of rearranging and substituting equations and calculating chemical quantities in the course.

Students could use this qualification to pursue a career in Medicine, Teaching, Research, Engineering, Forensics, Pharmacy, Pharmacology and so on. Chemistry combines well with Biology, Physics, Mathematics and Product Design.

ASSESSMENT and CONTENT

At AS Level there are two taught components each accounting for 50% of the AS grade, these are examined at the end of year in two 70 mark examinations. Both papers will assess practical skills with 10% of the paper also assessing KS5 mathematical skills.

Component 1: Breadth in Chemistry (1 hour 30minutes)
Component 2: Depth in Chemistry (1 hour 30 minutes)

At A Level there are three components. Each will assess practical skills and mathematical skills along with the content highlighted below:

Component 4: Periodic table, elements and physical chemistry (2 hours 15 minutes) 37%
Component 5: Synthesis and Analytical techniques (2 hours 15 minutes) 37%
Component 6: Unified Chemistry (1 hour 30 minutes) 26%

The course requirements...

A Grade 7 or higher in GCSE Chemistry or 7-7 in Combined Science. A Grade 7 or higher in Mathematics and Grade 6 or higher in English GCSE. Chemistry A Level students should also take A Level Mathematics.