

Chemistry: A-level (Awarding Body AQA)

ENTRY REQUIREMENTS

We expect students to have a grade 6 or better in GCSE Chemistry or GCSE Combined Science. We require students to have at least a grade 5 in GCSE English Language and at least a grade 6 in GCSE Maths.

CONTENT

First Year

- Physical Chemistry
- Atomic structure, amount of substance, bonding, energetics, kinetics, chemical equilibria
- Inorganic Chemistry
- Periodicity, Group 2 and Group 7
- Organic Chemistry
- Alkanes, halogenoalkanes, alkenes, alcohols, organic analysis

Second Year

- Physical Chemistry
- Thermodynamics, rate equations, the equilibrium constant (K_p), electrode potentials and electrochemical cells, acids and bases
- Inorganic Chemistry
- Period 3 oxides, transition metals
- Organic Chemistry
- Isomerism, carbonyl compounds, aromatic chemistry, amines, polymers, amino acids, proteins and DNA, organic synthesis, NMR spectroscopy, chromatography

You will sit three terminal exams. These encompass both subject content and practical skills met during the two-year course.

PROGRESSION

Chemistry is a great subject choice if you wish to pursue a career in Health and Clinical professions, such as Medicine, Nursing, Biochemistry, Dentistry or Forensic Science. It will also equip you for a career in industry, for example in the Petrochemical or Pharmaceutical industries.

GENERAL COMMENTS

Chemistry is the basis of everything we see. The materials that make our phones work, the energy we get from food, the pollution in our rivers and the starlight in the sky. All of these things and more are products of Chemistry. Studying Chemistry is challenging, but rewarding. It encourages logical thinking, deductive skills, analytical processing and a mathematical mind. If you are interested in the world around you, what it is made of and how it works, then Chemistry is for you.



A-level Chemistry is a very interesting subject. The syllabus covers a wide range of topics but I particularly enjoyed 'Acids and Bases', which shows a perfect balance of calculations and theory. The practical Chemistry sessions have developed my laboratory, analytical and deductive skills, all of which will be useful when I go on to study Medicine.

I joined Richmond Sixth Form College from a different school and found that Chemistry lessons were very inclusive and helped me meet new people and make friends. The teachers are very supportive, especially with revision, and are always happy to help which was of benefit in the more challenging aspects of the course.

PHOEBE WHITBREAD

