

Chemistry

Examination Board: AQA A Level in Chemistry: 7405

What will I learn?

The A Level course covers many GCSE topics in greater depth whilst preparing students for university. It places emphasis on why things happen in Chemistry:

- Why do atoms form bonds?
- What happens to the electrons in a chemical reaction?
- Why are some acids weak?
- Why are some reactions reversible?
- Why do different reaction conditions yield different products?
- How do certain chemicals interact with Biological molecules?
- How are compounds analysed in the laboratory?

Who is the course suited to?

Chemistry is a good choice for students considering careers in Medicine, Veterinary Science, Nursing, Dentistry and Forensic Science. Studying Chemistry will also prepare students for engineering and industry careers, such as those within the pharmaceutical or petrochemical sectors.

What is the structure of the course?

You will commence your course by learning about the fundamental ideas that underpin chemical reactivity and behaviour. The course focuses on the three main branches of Chemistry:

- **Physical Chemistry** in which you learn about the nature of how molecules interact including rates of reactions (kinetics), equilibria and chemical thermodynamics.
- **Inorganic Chemistry** which focuses on transition metal Chemistry, reactions in solution and patterns in the periodic table.
- **Organic Chemistry** which takes you from naming organic compounds and how reactions take place to the synthesis of small molecules, such as aspirin.

Learning the theory of instrumental techniques is also a key feature of the course and understanding of the chemical concepts is enhanced by a vast array of practical experiments.

Assessment

There is no coursework on this course. However, your performance during practicals will be assessed.

A Level: 2 x 2 hour written exams, and 1 x 1.5 hour exam at the end of the two years. Both theory and practical skills are examined. At least 15% of the marks for A Level Chemistry are based on what you learn in your practicals.

Reasons to consider doing Chemistry at A Level:

- As a subject which links well with other A Levels such as Physics, Biology or Mathematics.
- An A Level in Chemistry is an entry requirement for many Science and Technology courses.
- As a preparation for many non-scientific careers. Employers are increasingly appreciative of the general skills, such as problem solving, logical thought, numeracy and practical skills, which the course develops.