

OCR AS & A LEVEL CHEMISTRY (A)

A Level Chemistry will give you an exciting insight into the contemporary world of chemistry. It covers the key concepts of chemistry and practical skills are integrated throughout the course. This combination of academic challenge and practical focus makes the prospect of studying A Level Chemistry highly appealing. You will learn about chemistry in a range of different contexts and the impact it has on industry and many aspects of everyday life. You will learn to investigate and solve problems in a range of contexts.

COURSE CONTENT

Year 12

Module 1: Development of Practical Skills in Chemistry.

Module 2: Foundations in Chemistry.

Atoms, Compounds, Molecules and Equations; Amount of Substance; Acid-Base and Redox Reactions; Electrons, Bonding and Structure.

Module 3: Periodic Table and Energy.

The Periodic Table and Periodicity; Group 2 and the Halogens; Qualitative Analysis; Enthalpy Changes; Reaction Rates and Equilibrium (Qualitative).

Module 4: Core Organic Chemistry.

Basic Concepts; Hydrocarbons; Alcohols and Haloalkanes; Organic Synthesis; Analytical Techniques (IR, MS).

Year 13

In addition to the modules studied as part of Year 12, the following modules are studied in Year 13:

Module 5: Physical Chemistry and Transition Elements.

Reaction Rates and Equilibrium (Quantitative); pH and Buffers; Enthalpy, Entropy and Free Energy; Redox and Electrode Potentials; Transition Elements.

Module 6: Organic Chemistry and Analysis.

Aromatic Compounds; Carbonyl Compounds; Carboxylic Acids And Esters; Nitrogen Compounds; Polymers; Organic Synthesis; Chromatography And Spectroscopy (NMR).

ASSESSMENT

Year 12 examinations:

- **Breadth in Chemistry:** 70 marks, 1 hour 30 minutes written paper (50% of AS Level).
- **Depth in Chemistry:** 70 marks, 1 hour 30 minutes written paper (50% of AS Level).

Year 13 examinations:

- **Periodic Table, Elements and Physical Chemistry (01):** 100 marks, 2 hours 15 minutes written paper (37% of A Level) - assesses modules 1,2,3 and 5.
- **Synthesis and Analytical Techniques (02):** 100 marks, 2 hours 15 minutes written paper (37% of A Level) - assesses modules 1,2,4 and 6.
- **Unified Chemistry (03):** 70 marks, 1 hour 30 minutes written paper (26% of A Level) - assesses modules 1 to 6.

SUBJECT COMBINATIONS

A Level Chemistry matches well with A Levels in other Sciences, Mathematics and BTEC Engineering.



TRINITY
SIXTH FORM

ENTRY REQUIREMENTS

At least 5 GCSEs at grade 5 and above including English & Maths. Grade 5 in Maths is important as 20% of A Level Chemistry is maths based content.

Students should also have gained a minimum of two grade 5s at higher tier in GCSE Science. It is anticipated that students will have studied Chemistry as a Separate Science subject or followed the Combined Science route.

PROGRESSION

A Level Chemistry is a subject preferred by top universities and can lead directly into further study across a range of subjects. Higher Education programmes that follow this course include degrees in Medicine, Environmental Science, Engineering and Chemistry itself.

FUTURES

Science based A Level subjects are valuable to many vocational options post-18 because of the transferable skills developed throughout the course. An A Level in Chemistry will come in useful in careers such as Engineering, Scientific Research, Medicine, Environmental Science and Health and Social Care.



COURSE CONTACT

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