A Level Chemistry



What is Chemistry?

Chemistry is the study of matter and how it interacts with the world around us. It is at the forefront of research to tackle current and future challenges, from the development of cleaner fuels to the applications of smart materials. Studying Chemistry will develop your problem-solving and analytical skills, which are in high demand in nearly all industries. Chemistry students are sought after for the traditional science careers as well as law, finance and management roles.

Exam Board: OCR

Overview of course content

A Level (specification code: H432)

| Examination | % of A Level |
|--|-----------------|
| Periodic Table, Elements and Physical Chemistry | 37% |
| (Assesses content from modules 1, 2, 3 and 5) | |
| Exam duration: 2 hours 15 minutes (100 marks) | |
| Synthesis and Analytical Techniques | 37% |
| (Assesses content from modules 1, 2, 4 and 6) | |
| Exam duration: 2 hours 15 minutes (100 marks) | |
| Unified Chemistry | 26% |
| (Assesses content from all modules) | |
| Exam duration: 1 hour 30 minutes (70 marks) | |



Modules

Students will study various modules during this course, which are divided into key topics:

Module 1 - Development of Practical Skills in Chemistry In this module your practical skills will be assessed in a written examination

Module 2 - Foundations in Chemistry

The second module focuses on atoms, compounds, molecules and equations; amount of substance; acid-base and redox reactions; electrons, bonding and structure

Module 3 - Periodic Table and Energy

This module concentrates on the periodic table and periodicity; group 2 and the halogens; qualitative analysis; enthalpy changes and reaction rates and equilibrium (qualitative)

Module 4 - Core Organic Chemistry

The last module looks at basic concepts; hydrocarbons alcohols and haloalkanes; organic synthesis and analytical techniques (IR and MS)

Module 5 – Physical Chemistry and Transition Elements

In this module you will look into reaction rates and equilibrium (quantitative); pH and buffers; enthalpy, entropy and free energy; redox and electrode potentials and transition elements

Module 6 – Organic Chemistry and Analysis

This module focuses on aromatic compounds; carbonyl compounds; carboxylic acids and esters; nitrogen compounds; polymers; organic synthesis and chromatography and spectroscopy (NMR)

Careers/Future Opportunities

Studying Chemistry is an excellent grounding for many careers and higher education courses/opportunities, such as medicine, biochemistry, pharmaceuticals, scientific research, forensic science, vetinary science, as well as law, finance and management roles.

If you have any questions, please contact: office@kennetschool.co.uk