



A Level Chemistry

Chemistry for your future

Chemistry is a great choice of subject for people who want a career in health and clinical professions, such as medicine, nursing, biochemistry, dentistry or forensic science, as well as careers in industry. Chemistry will give you logical thinking skills and a greater depth of understanding of the world around us. Chemistry is also desirable for degree subjects like Law and Accounting.



What will you learn?



Our new course **Chemistry A** consists of 6 modules:

Module 1 - Development of practical skills in chemistry
Skills of planning, implementing, analysis and evaluation
Examined: in written exams and pass/fail teacher assessed
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 and MS)
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)
Examined: 3 Papers at end of the two year course
Periodic table, elements and physical chemistry (37%), Synthesis and analytical techniques (37%), Unified chemistry (26%)

AS Chemistry:

- The 1 year AS course has 2 papers testing content from modules 1-4

Progression onto A Level Chemistry will require at least 5 GCSEs at grade C or above. You will need to achieve grades BB in Core & Additional Science GCSE, or in Separate Science (with B in Chemistry), with at least a grade C in English Language GCSE, and a grade B in Mathematics GCSE. Please talk to the Head of Department if you are interested in this subject.