

CHEMISTRY

A bitesize overview of the curriculum.

YEAR 1

- Your practical skills are assessed in the final written examination and the practical endorsement component of the A Level course.
- Atoms, compounds, molecules and equations; Amount of a substance (concept of the mole); Acid-base and redox reactions; Electrons, bonding and structure.
- The Periodic Table, Group 2, the Halogens and Periodicity; Qualitative Analysis; Enthalpy Changes; Rates of Reaction and Equilibrium.
- Hydrocarbons; Alcohols and haloalkanes; Organic synthesis; Analytical techniques (IR and MS).

YEAR 2

- Development of practical skills in chemistry. The practical skills are assessed in the final written examination and the practical endorsement component of the A Level course.
- Physical chemistry and Transition Elements; Reaction rates and equilibrium (quantitative); pH and buffers; Enthalpy, entropy and free energy; Redox and electrode potential and Transition elements.
- Organic Chemistry and Analysis; Aromatic compounds; Carbonyl compounds; Carboxylic acids and esters; Nitrogen compounds; Polymers; Organic synthesis; Chromatography and spectroscopy (NMR).

WHAT SUBJECTS COULD I STUDY AT UNIVERSITY?

- Medicine
- Dentistry
- Biomedical Science/Biomedicine

WHAT CAREERS COULD THIS LEAD TO?

- Biotechnologist
- Chemical Engineer
- Biochemist

ENRICHMENT OPPORTUNITIES

- Participation in the Lower Sixth Cambridge Chemistry Challenge, Kelvin Science Essay Competition and the Chemistry Olympiad
- Advanced Science Society Lectures
- Participation in the Chemistry Symposium
- Revision and Academic Support Clinics throughout Sixth Form
- Sixth Form practical days at University of Bristol