Chemistry

Examination Board: OCR
Qualification: A level
Teacher Contact: Miss Millest and Mr Hellard

Entry Requirements: A grade 6 in Mathematics and a grade 6 in GCSE Chemistry or 6/6 in Trilogy Combined Science GCSE.

What will I study?

The A level course is comprised of six modules:

Module 1: Development of practical skills
Skills of planning, implementing, analysis and evaluation.

Module 2: Foundations in Chemistry
This unit includes the structure of the atom, the importance of atomic masses, formulae and equations and chemical bonding and structure.

Module 3: Periodic table and energy
This unit includes the periodic table, qualitative analysis, enthalpy change and reaction rates.

Module 4: Core organic
This unit includes the basic concepts of organic chemistry, hydrocarbons, alcohols, haloalkanes, the synthesis of organic compounds and analytical techniques.

Module 5: Physical chemistry and transition elements
This module includes reaction rates and equilibrium, entropy, enthalpy, electrode potentials and transition elements.

Module 6: Organic chemistry and analysis
This module includes the study of aromatic, carbonyl and nitrogen compounds, as well as acids and esters. In addition, organic synthesis, chromatography and nuclear magnetic resonance will be studied.

How will I be assessed?

There are three papers sat at the end of Year 13. Paper 1 assesses Modules 2,3, & 5 and Paper 2 assesses 2,4 & 6. Paper 3 is synoptic so covers all parts of the specification. Students also work towards their Science Practical Endorsement. This is internally assessed and externally moderated through at least 12 practical activities over the two years. This is reported separately on students' certificates alongside their overall grade for the A Level qualification.

Am I suited to this course?

You would be well suited to studying Chemistry at A level if you:

- enjoyed studying GCSE Science and are motivated to take your understanding much further
- enjoy a challenge and are willing to persevere
- can apply your knowledge to unfamiliar situations
- enjoy the practical element to Science
- are competent and confident at Mathematics.

What other subjects does it complement?

Chemistry is an excellent course to take with Biology, Physics, Mathematics and/or Geography. If you are considering Biological Sciences, Medicine or Veterinary Science at university, Chemistry is usually a requirement.

Where can it lead?

Chemistry is a passport to a host of careers including, most obviously, medicine, veterinary science, teaching, engineering, physiotherapy and psychology. Recognised as a sign of high academic achievement, it is accepted as a valuable qualification for all science-based courses at university and is essential in some cases.