

Chemistry

Pathway 1

Course description:

From the clothes we wear to the air we breathe, from novel materials such as Kevlar, the plastic for bullet proof vests, to a deeper understanding of the environmental impact of our modern lives, the science of chemistry influences our lives in an uncountable number of ways. This course is designed to raise the awareness of pupils for the role of chemistry in both our everyday lives and wider society. The emphasis is on the ways in which chemistry is used – and the work that chemists do. It contains plenty of opportunities to practice practical skills.

Qualifications required:

- In line with the entry requirements for a Pathway 1 subject.
- Grade 6 in GCSE Chemistry or grade 7-6 in GCSE Combined Science.
- Grade 5 in GCSE English Language or Literature and Maths

Aims of the course:

We work to the nationally popular OCR Chemistry 'A' specification. The course aims to cover a wide range of organic, physical and inorganic chemistry that will prepare the learner sufficiently well to move on to a higher level chemistry course. The full A level course also gives the learner the opportunity to attain the practical endorsement certificate. This is usually required by higher level chemistry courses alongside their required A level chemistry grade.

Future prospects:

- Students with A level Chemistry may choose to continue studying within this field. Degree courses in Chemistry and Chemical Engineering in particular give rise to good starting salaries with significant opportunities within pharmaceutical, petrochemical, health, environmental and manufacturing sectors.
- Chemistry is a key A level for those wishing to pursue a career in medicine, dentistry or related areas.
- The transferable skills gained on the course are recognised and will benefit those who wish to study Law, Journalism, Accountancy or other financial sectors.

Student feedback:

"There are good independent practicals to develop skills."

"I can see the relevance of the subject to everyday life."

"I see the world in a different light now"

Subject Teachers:

Mr Carlisle (Head of Chemistry), and Miss Waterfall

Chemistry

Features of the course:

AS papers do not count towards the full A level.
A level is 3 papers (see diagram)

2 The specification overview

2a. Overview of A Level in Chemistry A (H432)

Learners must complete all components (01, 02, 03 and 04).

Content Overview	Assessment Overview	
<p>Content is split into six teaching modules:</p> <ul style="list-style-type: none"> Module 1 – Development of practical skills in chemistry Module 2 – Foundations in chemistry Module 3 – Periodic table and energy Module 4 – Core organic chemistry Module 5 – Physical chemistry and transition elements Module 6 – Organic chemistry and analysis <p>Component 01 assesses content from modules 1, 2, 3 and 5.</p> <p>Component 02 assesses content from modules 1, 2, 4 and 6.</p> <p>Component 03 assesses content from all modules (1 to 6).</p>	<p>Periodic table, elements and physical chemistry (01)</p> <p>100 marks</p> <p>2 hours 15 minutes written paper</p>	<p>37%</p> <p>of total A level</p>
	<p>Synthesis and analytical techniques (02)</p> <p>100 marks</p> <p>2 hours 15 minutes written paper</p>	<p>37%</p> <p>of total A level</p>
	<p>Unified chemistry (03)</p> <p>70 marks</p> <p>1 hour 30 minutes written paper</p>	<p>26%</p> <p>of total A level</p>
	<p>Practical Endorsement in chemistry (04)</p> <p>(non exam assessment)</p>	<p>Reported separately</p> <p>(see Section 5)</p>

Methods of Assessment:

All aspects of the A level are assessed by external examination. The three terminal A level papers are 100% synoptic. Paper 1 and Paper 2 (37% of A level each) both contain a mixture of multiple choice, short and longer answer questions. Paper 1 and two have some common content but also have specific content.

Paper 3 contains only short and longer answer questions (26% of A level) and can be form any of the 6 modules.

Practical skills questions are included in all 3 papers.

There is a separate “Practical Endorsement” certificate (which carries no UCAS points). This is assessed throughout the course on key practical activities by your teacher and is not required to pass the A level.