

A-Level Chemistry

Why study Chemistry?

Imagine a world without chemistry; no medicines, no plastics, no fuels, no fertilisers... It would be a world lacking in warmth and good health, food and flavour, colour and cleanliness. Look around, you are surrounded by substances which have been developed, tried and tested by chemists.

Aims of the course

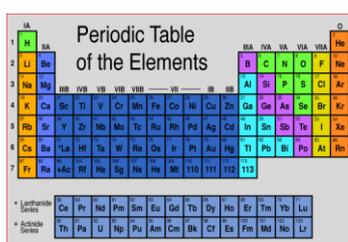
- To develop an interest in and enthusiasm for chemistry.
- To prepare students for the further study of chemistry
- To give students the skills, knowledge and understanding to pursue a career in chemistry.

Course Requirements

- Grade 7 in GCSE Chemistry or GCSE Combined Science.
- Grade 7 in GCSE Mathematics
- Commitment - Chemistry A-level is not a 'soft' option!

What will you study at Chemistry A-level?

You will study the three main components of Chemistry- physical, inorganic and organic, you will also develop the skills needed to conduct chemical experiments which yield valid results, as well as the ability to analyse and evaluate those results.



Periodic Table of the Elements

1	H	He																	Ne
2	Li	Be											B	C	N	O	F	Ne	
3	Na	Mg											Al	Si	P	S	Cl	Ar	
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr	
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe	
6	Cs	Ba	La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Tm	Yb	Lu			
7	Fr	Ra	Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr		

* Lanthanide Series
* Actinide Series



The Chemistry A-level qualification comprises of:

Module 1: Development of practical skills

In this module you will develop the skills of planning, implementing, analysis and evaluation. This module will be assessed within written examinations.

Module 2: Foundations in chemistry

In this module you will study: atoms, compounds, molecules and equations; amount of substance; acid-base and redox reactions; electrons bonding and structure.

Module 3: Periodic table and energy

In this module, you will study: the Periodic table and periodicity; group 2 and the halogens; qualitative analysis; enthalpy changes; reaction rates and equilibrium.

Module 4: Core Organic chemistry

This module includes basic concepts, hydrocarbons, alcohols and halogenoalkanes, organic synthesis and analytical techniques.

Module 5: Physical chemistry and transition elements

In this module you will study: reaction rates and equilibrium; pH and buffers; enthalpy, entropy and free energy; redox and electrode potentials; transition metals.

Module 6: Organic chemistry and analysis

This module includes aromatic compounds, carbonyl compounds, carboxylic acids and esters, nitrogen compounds, polymers, organic synthesis, chromatography and spectroscopy.

Practical Endorsement

This is a teacher assessed component. You will complete a minimum of 12 practical activities: your performance in these will be reported separately to the A-level grade.

Assessment for the A-level will comprise of three written papers:

Paper 1 assesses content from Modules 1, 2, 3 and 5

Paper 2 assesses content from Modules 1, 2, 4 and 6

Paper 3 assesses content from all six modules.

Our Results...

Over the last three years, A Level average % A*/A/B is 71%

Recent destinations of our students of Chemistry include:

- Medicine at Southampton
- Neuroscience with pharmacology at Nottingham
- Veterinary Science at Bristol
- Medicine at New College Oxford
- Biochemistry at Leeds
- Medicine at Bristol
- Pharmacology at Leeds
- Medicine at Trinity Hall Cambridge
- Veterinary Medicine at Emmanuel, Cambridge
- Dentistry at King's college London
- Chemistry at St Andrews
- Chemistry at Durham
- Biochemistry at Sheffield
- Biochemistry at Bristol

For further information, please contact:

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