



Guilsborough Academy Sixth Form KS5 Curriculum

A Level Chemistry

Course Title:

Chemistry

Entry Requirements:

2 grade 6s in GCSE Science. For triple Science one must be Chemistry.
Grade 6 in GCSE Maths

Examination Board

OCR A

Assessment:

Paper 1 Periodic table, elements and physical chemistry, 2 hours 15 mins, exam worth 37%

Paper 2 Synthesis and analytical techniques, 2 hours 15 minutes, exam worth 37%

Paper 3 Unified chemistry, 1 hour 30 mins, exam worth 26%

Non-exam assessment – Practical endorsement for chemistry – Pass/Fail

Is this course right for me?

A Level Chemistry will give you an exciting insight into the contemporary world of chemistry. It covers the key concepts of chemistry, and practical skills are integrated throughout the course. This combination of academic challenge and practical focus makes the prospect of studying A Level Chemistry highly appealing.

You will learn about chemistry in a range of different contexts and the impact it has on industry and many aspects of everyday life. You will learn to investigate and solve problems in a range of contexts.

Key features

- Simple straightforward assessment through examinations.
- Based on key concepts in chemistry.

A LEVEL CHEMISTRY

Unit Contents:

Module 1 - development of practical skills in Chemistry

Skills of planning, implementing, analysis and evaluation.

Module 2 - Foundations in Chemistry

Includes: atoms and ions, amount of substance, acids + redox, electrons + bonding, shapes of molecules and forces.

Module 3 -Periodic table and energy

Includes: Periodicity, trends in periodic table, enthalpy, reaction rates and equilibrium.

Module 4 - Core organic Chemistry

Includes: basic concepts of organic chemistry, alkanes, alkenes, alcohols, haloalkanes, organic spectroscopy and organic synthesis.

Module 5 - Physical Chemistry and transition elements

Includes: rates of reaction, equilibrium, acids, bases, pH, buffers, neutralisation, enthalpy, entropy, redox and electrode potentials.

Module 6 - Organic analysis and analysis

Includes: aromatic Chemistry, carbonyls, carboxylic acids, amines, amino acids, proteins, organic synthesis, chromatography and spectroscopy.



Progression:

A Level Chemistry is an excellent base for a university degree in healthcare such as medicine, pharmacy and dentistry as well as the biological sciences, physics, mathematics, pharmacology and, of course, Chemistry itself. Chemistry is also taken by many law applicants as it shows you can cope with difficult concepts as well as providing vital understanding for specialising in patent law.

A range of career opportunities including chemical, manufacturing and pharmaceutical industries and in areas such as forensics, environmental protection and healthcare. The problem solving skills are useful in many other areas, such as law and finance.

Examples of university courses and grades required:

- Leicester University BSc (Hons) Chemistry - BBB
- Durham University BSc (Hons) Chemistry - A*AA
- Warwick University BSc (Hons) Chemistry - AAB
- Birmingham University- Mb ChB Medicine - A*AA
- Nottingham University- BVMBVS Veterinary Medicine and surgery - AAB



Further Information Contact:

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