

Guilsborough Academy Sixth Form

KS5 CURRICULUM

Course Title: **Chemistry**

Examination Board: OCR



Entry Requirements: Grade B in GCSE Chemistry, B in other Sciences, BB in double award science GCSE and B grade in GCSE Mathematics.

Assessment: **A Level**
Total of 6 hours of examinations (2 x 2 hours 15 minutes and 1 x 1 hour 30 minutes) taken at the end of the course.

AS level

Two examinations can be taken at the end of the first year. If a student continues to A level these exams do not count towards the final grade.

To achieve a Practical Endorsement you will be expected through a range of experiments to display your competency in:

Following procedures, applying an investigative approach when using instruments and equipment, working safely, making and recording observations and researching, referencing and reporting.

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
- Opportunities to build practical skills through a range of experiments and investigations.

Unit Contents:

Atoms, compounds, molecules and equations Enthalpy, entropy and free energy
Amount of substance Redox and electrode potentials
Acid–base and redox reactions Transition elements
Electrons, bonding and structure Organic chemistry
The periodic table and periodicity Polymers
Group 2 and the halogens Organic synthesis
Reaction rates and equilibrium Analytical techniques (IR and MS)
pH and buffers Chromatography and spectroscopy (NMR)

Emphasis throughout the course is on developing knowledge, competence and confidence in practical skills and problem solving. You will learn how society makes decisions about scientific issues and how sciences contribute to the success of the economy and society.

Progression:

A Level Chemistry A 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 analytical chemistry. Chemistry is also taken by many law applicants as it shows you can cope with difficult concepts.

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 for many other areas, too, such as law and finance.

Example of university courses and grades required

- **Leicester University** BSc (Hons) Chemistry typical offer ABB
- **Durham University** BSc (Hons) Chemistry typical offer A*AA
- **Warwick University** BSc (Hons) Chemistry typical offer AAB

Further Information Contact:

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