

A-level Chemistry

Board and Specification: OCR AS Level Chemistry A (H032), A-Level Chemistry A (H432)
Head of Department: Mrs Dorothy Serafini (d.serafini@cwlc.email)

Subject specific entry requirements:

- Triple Science must have a grade 7 in Chemistry, with grade 6s in the other two sciences
- Grade 8-7 in Combined Science where Triple Science is not taken
- Grade 4 in English Literature and/or English Language
- Grade 6 or above in GCSE Mathematics

What skills are required of students?

Independent learning of definitions and reaction mechanisms and understanding some of the concepts introduced during the course.

Course details

As an A-level Chemistry student you will further develop the practical skills gained at GCSE. You will also undertake topics such as: Foundations in chemistry including bonding, acid-base and redox reactions; periodic table (group 2 elements, plus halogens and transition metals) and energy including qualitative analysis; core organic chemistry; physical chemistry; advanced organic chemistry and analysis.

Students of A-level Chemistry generally leave the course with the ability to recognise, recall and show understanding of specific chemical facts, terminology, principles, concepts and practical ability. The A-level Chemistry course will show students how to use information with the view of interpreting phenomena and effects of chemical principles, as well as presenting arguments and ideas in a logical, clear manner.

Modules titles and codes:

A-level Chemistry (H432)

Content is split into six teaching modules:

- 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
- Practical Endorsement (over 2 years)

What kinds of work will you do in class and at home?

- Following instructions to carry out practical work and then writing up that work including presenting the results clearly, processing the results by drawing graphs and carrying out calculations, drawing conclusions from the results and analysing and evaluating the results.
- You will design experiments to test hypotheses and to commit to memory definitions and reaction mechanisms.
- Support will be given with more than one teacher available to explain these new concepts in a different way that may aid understanding. Small groups should allow staff to give regular individual help during lessons.
- In year 13 you will be asked to produce notes at home and bring them to lessons to either annotate them or use them to answer exam questions. This maximises the learning time during lessons. This may be introduced into year 12 also.

What other A/AS-levels does your subject connect well with?

Biology, Mathematics and Physics.

What types of university course will be helped by this A-level?

Having an A-Level in chemistry is a very desirable qualification and is highly respected in academic circles. If you are considering a career in any form of medicine including doctor or veterinarian then you will find A-Level Chemistry compulsory; however there are many subjects and careers where this is the case, as well as there being many options where an A-level chemistry qualification is desirable.

Possible career and course options available to you with an A-Level Chemistry qualification include: medicine, pharmacy, veterinary science, chemistry, biochemistry, food science/nutrition and forensic science.

Other career options include: biological/engineering, optical management, optometry, microbiology, natural sciences, pharmacology, software engineering and physiology. All of which require A-level Chemistry as essential (unless other qualifications are offered).

Many other courses state that A-level Chemistry is desirable, such as nursing, physiotherapy, radiography, paramedic courses, law and zoology.