

Advanced GCE in Chemistry

Board: OCR

Qualification: Advanced Level GCE in Chemistry

What is the course about?

The Advanced GCE in Chemistry has been designed to develop student interest in, and enthusiasm for chemistry, including developing an interest in further study and careers in chemistry.

Course Outline:

The specification is divided into topics, each covering different key concepts of chemistry. Teaching of practical skills is integrated with the theoretical topics and they are assessed through the written papers: there is no separate practical exam.

Year 12 starts with foundation topics: atomic structure & bonding; shapes of molecules, intermolecular forces, quantitative chemistry, redox, and the periodic table.

In Year 13 two further modules will be studied.

Physical Chemistry & Transition Elements module, where concepts include: enthalpy, entropy, free energy, electrode potentials, pH and buffers.

Organic Chemistry & Analysis module, where concepts include: arenes, carbonyl compounds, carboxylic acids, amines, polymers, nuclear magnetic resonance and gas chromatography.

Who should apply for the course?

Chemistry relies on practical and problem solving skills. Good mathematical skills are also required, particularly in the second year of the course. If you are well motivated, are interested in Chemistry and enjoy a challenge, then this is the course for you. You must be able to work independently at home to review and learn the material that has been covered in class. It is a significant step up from GCSE Chemistry but you will be well supported in class and bridging material, related to GCSE Chemistry, will be supplied at the start of the course.



Why might this course be for me?

Chemistry is a subject which always leaves you asking some sort of question at the end. It is great for the inquisitive and eager of those amongst us who like to know how the world we live in works. Chemistry is a science that appeals to both practical and theoretical scientists. When you carry out practical experiments like synthesising aspirin, you get to see the connection between the chemical theory and real-life application.

Where can I go next?

Doing an A Level in chemistry can open so many doors for you in the future. It is seen, and quite rightly so, as a challenging, academic and rigorous A Level that will impress a lot of universities/employers. Studying A-Level Chemistry can lead to many careers in healthcare such as medicine, pharmacy and dentistry, but is also extremely useful in careers in the biological sciences, physics, mathematics, pharmacology and analytical chemistry. Chemistry is also taken by many law and accountancy applicants as it shows you can cope with difficult concepts.