

# CHEMISTRY

## A LEVEL COURSE DESCRIPTION

The A-Level Chemistry course at this centre follows the OCR A Advanced Chemistry course. This route is very strongly based on the key concepts as well as the real-life stories in which chemistry happens. Over the two years, you will have the opportunity to find out about parts of chemistry as diverse as the elements that make up your body, the chemistry of petrol and the way in which chemists set about designing and manufacturing pharmacologically active drugs. There is a very strong emphasis on practical work and students on the course typically get to do one or two large practical experiments every week. You will learn new techniques such as titration and reflux as well as building upon GCSE knowledge.

## ENTRY REQUIREMENTS

If you wish to study Chemistry and no other science subject, you need to achieve at least a 7,7 in GCSE Combined Science or 777 in GCSE Triple Science course. If you wish to study Chemistry alongside one or more other science disciplines then you will need to have studied GCSE Triple Science, and achieved at least an 888. High levels of Maths and English are also of great benefit in this A-Level.



## Progression

An A-Level in Chemistry will lead you onto many different career paths and university degrees. Chemistry is essential for any medical or medically related degree, such as pharmacy or bio-medical sciences. Over the last few years, we have seen students go on from Chemistry to study medicine at University, with as many as six students going on to study Medicine in a year. Chemical Engineering has also become much more popular amongst the chemistry students over recent years; with many leaving university to take on careers in established firms or taking up other career paths including teaching.





In Year 13, a similar model involves three exams on the fundamentals of chemistry, scientific literacy and practical skills. Over the two years you will undertake 12 assessed practicals that are an essential part of the A-Level known as the practical endorsement. We expect all students to pass this component as you will be closely guided and supported to ensure that by the time you complete the course you are an adept practical chemist.

### DEPARTMENTAL ENRICHMENT AND STUDENT SUPPORT

The Chemistry course that is followed at the centre is well based in how Chemistry is actually used in the real world. This means that we learn the chemistry while we study various real life situations in which Chemistry is used.

We strongly support student enrichment in preparation for both exams and further study. To this end opportunities to attend trips, lectures and webinars outside of school will be provided on a regular basis.

On a more academic front, we have established links with the Chemistry department at Queen Mary University London in Mile End and over the past few years several Year 13 students went to use the spectroscopy facilities at the university to enhance their extended investigations.

Teaching and learning material is always available online.

Chemistry is a very challenging subject and students are required to learn a great deal in a short time. Getting through the AS-Level exams in year 12 is a major hurdle and we expect all students to work very hard. Student support starts at home and you will be expected to work for approximately 5 hours at home in addition to your lessons. We provide all students with an online textbook and resource suite, but you are also advised to buy a revision guide (this is supplied by the department and your money will be refunded if returned in good condition), which will supplement the work and break down key points into easy chunks.

The extensive study support programme is the centre point of our student support and targeted students are expected to attend these after school sessions once a week to get help with difficult subject material and exam practice. Students who attend these sessions are the ones who excel in their performance. Sessions also run in the holidays and are open to all chemistry students.

## Routes for Success - Sciences

The Routes to Success Programme is designed for ALL students in Year 12 at St Angela's Ursuline 6th Form. The SCIENCES programme aims to offer students opportunities to work with both industry and universities, opportunities will include links with; London Hospital, Institute

of Civil Engineers, Sutton Trust, Kings' College London, Barts and Royal London and Imperial. Summer school opportunities will include links with; City Medicine, City Nursing, Chrysalis, Surrey Science, Queen Mary Engineering and Warwick Medicine.

Please note- All Year 12 students will select one main 'Route for Success' from these in order to experience a specialist enrichment and learning support programme. It will, of course, be possible to select a subject/subjects from another route on your timetable. We base our Routes to Success Programme on the university curriculum structure and university links are not exclusive to one route, so can be accessed by all students.

