

# A level Chemistry

## (OCR Chemistry A)

### Summary

OCR A level Chemistry provides you with a good understanding of key chemical concepts. Areas covered include organic chemistry, atomic structure, enthalpy, entropy and free energy calculations, intra- and inter- molecular forces and bonding, the environmental impact and sustainability of chemical processes and the study of different analytical techniques such as NMR and IR spectroscopy. You will also develop other qualities such as problem solving, data interpretation and develop practical skills. Chemistry at A level is essential if you are considering medicine, veterinary science or dentistry.

### Year 1 content

Your study will look at many aspects of Chemistry which develops further topics learned at GCSE Science and Chemistry.

1. Development of practical skills in chemistry,
2. Foundations in chemistry,
3. The periodic table and energy,
4. Core organic chemistry.

There is no separate practical assessment for the stand alone AS level, but the planning, analysis and evaluation of practical work is included in the written papers.

There are 2 written exams with equal weighting in the June exam series.

### Year 2 content

The full A level course will cover the four units listed in year 1, plus 2 additional units;

5. Physical chemistry and transition elements,
6. Further organic chemistry and analysis.

There will be 3 written exams taken in June of the second year of teaching.

The assessment of practical work will be included both in the written exams and through a Practical Endorsement. This will assess students practical capabilities throughout the course and is issued alongside the A level grade as a Pass or Fail.

### What you gain

You will be taught by two experienced teachers, in well-equipped laboratories and offered regular after school clinics to provide support where needed. There are also many resources such as fact sheets, past papers and copies of presentations available on-line.

You will be encouraged to attend sessions at local universities, in order to better understand what chemistry has to offer in higher education.

### **What you need**

Five GCSE grades 9 to 4 with a 6 in GCSE Chemistry (triple award) or 6/6 in Combined Science and a 6 in Maths and English. Chemistry complements both Biology and Physics at A level, where there are several areas of common interest. Chemistry also works well alongside Maths, Geography and Economics.

### **What you can progress to**

You could progress to higher level study such as a medicine, dentistry, materials science, brewing, chemical engineering, nanotechnology, biochemistry, forensic and environmental science, pharmacy or drug design. This subject is also highly respected by a wide variety of sectors such as marketing, accountancy and banking organisations, due to the high level problem solving skills you will develop.

### **Materials**

You will be expected to purchase the OCR approved year 1 and Year 2 text books for this course. In addition a white lab coat would be useful.