

Course Facts & Figures at a glance...

Subject Leader Mrs Bruce

Course Title A-Level Chemistry

**QAN Code** A Level: 601/5731/8

Awarding Body

## **Unit Titles**

In each year of study topics will inlcude Physical Chemistry, Inorganic Chemistry and Organic Chemistry.

## Assessments

Paper 1 - 35% Paper 2 - 35% Paper 3 - 30%

Possible career options include roles such as analytical chemist, chemical engineer, clinical biochemist, pharmacologist, doctor, research scientist, toxicologist, chartered certified accountant, environmental consultant, higher education lecturer, patent attorney, science writer, secondary school teacher and many more!

## A Level: Chemistry

A level Chemistry goes into much more detail than GCSE. It attempts to answer the big question 'what is the world made of' and it's the search for this answer that makes the subject so fascinating.

From investigating how one substance can be changed drastically into another to researching a new wonder drug to save millions of lives, the opportunities that chemistry provides are endless.

AS Chemistry lasts one year, with exams at the end.

A-level Chemistry lasts two years, with exams at the end of the second year.

Topics covered are as follows:

Physical chemistry

Including atomic structure, amount of substance, bonding, energetics, kinetics, chemical equilibrium and Le Chatelier's principle.

Inorganic chemistry

Including periodicity, Group 2 the alkaline earth metals, Group 7(17) the halogens

Organic chemistry

Including introduction to

organic chemistry, alkanes, halogen alkanes, alkenes, alcohols, organic analysis

## Second year of A-level

Physical chemistry

Including thermodynamics, rate equations, the equilibrium constant, electrode potentials and electrochemical cells

Inorganic chemistry

Including properties of Period 3 elements and their oxides, transition metals, reactions of ions in aqueous solution

Organic chemistry

Including optical isomerism, aldehydes and ketones, carboxylic acids and derivatives, aromatic chemistry, amines, polymers, amino acids, proteins and DNA, organic synthesis, NMR spectroscopy, chromatography

There are three exams at the end of the second year for A Level.