

# Chemistry

<b>Qualification:</b>	A-Level Chemistry
<b>Additional Entry Information:</b>	GCSE Maths grade B at higher tier GCSE English Language grade B plus GCSE Chemistry grade B Or GCSE Double Award Science grade AB If the course is oversubscribed priority will be given to those who have an A in Maths and Chemistry / Double Award Science

Speak to **Dr S Ford** for more information.

## **What do students need to know or be able to do before taking the course?**

The course requires a good understanding of the chemistry topics taught at GCSE in years 10 and 11. Pupils must have a good understanding of basic mathematical concepts e.g. rearranging equations; changing units; significant figures etc. Please note that 20% of marks on each exam paper are from calculations questions, hence the compulsory test at the beginning of the course. Medical Science may be a more appropriate choice of subject for some students.

## **What will students learn on this course (skills and course content)?**

This course builds on skills acquired at GCSE and develops the student's ability to assimilate knowledge, concepts and techniques. There is also a significant development in practical skills through which the student will learn about the importance of experimental evidence and the theories that arise from this. The course looks at the beneficial role chemistry plays in society for example the manufacture of polymers such as polyester and nylon and pharmaceutical products like aspirin. Analytical techniques, widely used in the detection of drugs and environmental monitoring, are also studied.

## **What sort of student is this course suitable for?**

To succeed at A-level Chemistry you must be conscientious, have excellent attendance and be prepared to try your best. You should have an interest in chemistry and science in general.

## **What kind of work will students need to be able to do outside of lessons?**

You will need to consistently work hard and be resilient. Usually 2 pieces of homework are set weekly, with regular tests to revise for. It is advised that previous lesson notes are read over before each lesson.



## **What is the course content and how is this assessed?**

The course is taught by Dr Ford and Dr Caulfield.

### AS level

Students will be required to sit 2 exams based on the following:

Unit 1 - The language of chemistry; Structure of matter; Simple reactions 20% of overall A level

Unit 2 - Energy; Rates; Chemistry of carbon compounds. 20% of overall A level

### A2 level

Students will be required to sit 2 exams based on the following:

Unit 3 - Physical and Inorganic chemistry. 25% of overall A level

Unit 4 - Organic chemistry and Analysis. 25% of overall A level

Unit 5 - Practical examination (Task and theory paper). 10% of overall A-level

## **What could students go on to do at the end of this course?**

Chemistry is a requirement for medical degrees and many related fields e.g. dentistry, pharmacy, physiotherapy etc. It would also be an advantage for the following: veterinary science, zoology, engineering, environmental science, archaeology, forensic science and many more. Even if you do not intend doing a science degree or even a science related subject at university, chemistry is still a good subject to choose as you can access most degree courses with it.

