

# CHEMISTRY

## A Level

**Awarding body: Edexcel**

### Course content

In Chemistry you will explore your ability to analyse and explain data, recognise trends and patterns and solve problems which have relevance in any work environment.

This specification provides a modern course which will help you to relate what can appear to be obscure knowledge with the world around you. It shows you the relationship between the development of the subject and its social, economic, environmental and technological applications by using specific in context examples. You can also develop your knowledge through practical investigation and test your own understanding by explaining and evaluating your findings.

It is interesting, fun and we love teaching Chemistry here at Fullbrook!

**Unit 1:** You will learn about the following

Atomic Structure and the Periodic Table, Bonding and Structure, Redox, Inorganic Chemistry and the Periodic Table, Formulae, Equations and Amounts of Substance

**Unit 2:** You will learn about the following

Bonding and Structure, Formulae, Equations and Amounts of Substance, Organic Chemistry, Modern Analytical Techniques, Energetics, Kinetics & Equilibrium

The A Level is assessed through 3 written exams at the end of the year. A minimum of 20% of the marks across both papers will be awarded for mathematics at Level 2 or above. You will receive a separate grade for practical competency by completing a series of practical tasks during the year.

**Paper 1: Advanced Inorganic and Physical Chemistry (30%)**

Atomic Structure and the Periodic Table, Bonding and Structure, Redox, Inorganic Chemistry, Formulae, Equations and Amounts of Substance, Energetics, Equilibrium, Equilibrium II, Acid-base Equilibria, Energetics II, Redox II, Transition Metals

**Paper 2: Advanced Organic and Physical Chemistry (30%)**

Bonding and Structure, Redox I, Formulae, Equations and Amounts of Substance, Organic Chemistry I, Modern Analytical Techniques I, Kinetics I, Kinetics II, Organic Chemistry II, Organic Chemistry II, Modern Analytical Techniques II

**Paper 3: General and Practical Principles in Chemistry (40%)** A

synoptic paper covering the whole specification. Some questions will assess conceptual and theoretical understanding of experimental methods.

### Teaching and learning methods

We use practical work, discussion, note-taking, problem solving, group and paired work, analysis and interpretation, calculations, reading, independent research, and exam practice. You may sometimes take part in teams to

Science  
A level

Big enough to challenge, small enough to care



# CHEMISTRY

compete against each other when revising a topic! As a department we have regular weekly support sessions as well as having an open-door policy to ask questions.

## Skills and Commitment

Students who take an A level in Chemistry will have enjoyed the GCSE but feel they still have unanswered questions and a desire to understand more about the world around us at a fundamental level. We look at Chemistry in context, including the environmental, pharmaceutical and medicinal worlds and ask students to apply their knowledge and understanding to some concept based tasks within these modern day situations.

## Cost

The Edexcel Chemistry textbook will be supplied for the students at a cost of £20. There will be a deposit system which will allow a full refund, as long as the books are handed back unmarked and in a good condition at the end of the year. A small voluntary contribution of £3 will be requested for past paper exam packs.

## Progression

Chemistry complements many other A level subjects including Physics, Biology, Maths, Geography and PE and is also highly regarded as a stand- alone Science. Lots of students continue with their Chemistry studies and are choosing careers linked to this exciting and contemporary subject. Chemistry is often a compulsory AS or A-Level for students wishing to pursue a career in Medicine, Veterinary Science, Dentistry or Pharmacy.

## Entry requirements

Students wishing to study A Level Chemistry must achieve **Grade 6** in two Science (Core, Additional or Extension) GCSE's, whilst 6 in Maths and 5 in English are recommended.

\*Thinking of studying more than one A level Science subject or taking A level Science with A level Mathematics? We **strongly recommend** that students wishing to study more than one A level Science subject, or an A level Science and A level Mathematics subject, have grades 7/8 or above in their GCSE Science subjects and GCSE Mathematics.

## Contact

For further information please contact Mr Burford, Head of Science.

Science  
A level

Big enough to challenge, small enough to care

