

# CHEMISTRY

## A LEVEL (AQA)



This course is designed to encourage candidates to:

- Gain hands-on practical skills and data analysis skills
- Appreciate how science works and its relevance beyond the laboratory
- Develop an enthusiasm for Chemistry
- Study Chemistry in a contemporary context.

A level Chemistry is a two year course leading to a full A level.

### What will you learn?

From the first year, this course stimulates the enthusiasm and independence of students, emphasising the ways in which chemistry underpins modern life and how chemists work. The course also focusses on developing practical skills and investigation methods.

The content is split into three main sections:

#### Physical Chemistry:

- Atomic Structure
- Amount of Substance
- Bonding
- Energetics
- Kinetics
- Chemical Equilibria
- Redox reactions
- Thermodynamics
- Rate equations
- Electrochemistry
- Acids
- Bases.

#### Organic Chemistry:

- Alkanes
- Halogenoalkanes
- Alkenes
- Alcohols
- Analysis
- Isomerism
- Aldehydes
- Ketones
- Carboxylic acids
- Aromatics
- Amines
- Polymers
- DNA and proteins
- Synthesis
- NMR
- Chromatography.

#### Inorganic Chemistry:

- Periodicity
- Group 2
- Group 7
- Period 3 and their oxides
- Transition metals
- Reactions of ions.

### How will you be assessed?

Paper One

Inorganic and Physical Chemistry (and relevant practical skills)

2 hours - 35% of A Level

Paper Two

Organic and Physical Chemistry (and relevant practical skills)

2 hours - 35% of A Level

Paper Three - Any content

2 hours - 30% of A Level

### Where will it take you?

Chemistry unlocks the door to a realm of further study and career opportunities, including medical, research, and product design opportunities. When paired with Biology A-Level, it allows students to take their pick of high quality university courses. This is an academic course which would suit students who enjoy science and can envision a future career in a scientific field.

### Who to talk to?

Please speak to Mrs Liz Jones, or email: [Liz.Jones@thebourneacademy.com](mailto:Liz.Jones@thebourneacademy.com)

### What will you need to study this course?

Five or more 9-4 grades at GCSE including English and Maths. A grade 6 or higher in GCSE Chemistry or in Combined Science at GCSE (6-5 at Combined is acceptable). A grade 5 or higher in Maths is essential.