CHEMISTRY
A LEVEL (AQA)

The experimenter who does not know what he is looking for will never understand what he finds.

— Claude Bernard

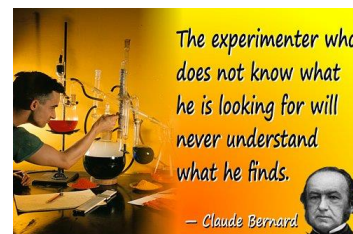**This course is designed to encourage candidates to:**

- 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 (A2)

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 and Bases*

Organic Chemistry
- Alkanes, Halagenoalkanes, Alkenes, Alcohols, Analysis, Isomerism*, Aldehydes and 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*

All starred content is A Level only.

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?

This is a traditional academic route which would support you in a variety of science based careers, or to go on and study sciences at University.

Who to talk to?

Please speak to Imogen Gater, or email Imogen.gater@thebourneacademy.com

What will you need to study this course?

Students will need to have five or more A*-C grades at GCSE. You must have at least a grade B in GCSE Core and Additional Science or B in GCSE Chemistry. You should also have at least a B in Maths.