



# Chemistry (Linear)

OCR: Course Code H432

Contact: Ms J Box

## Course Outline:

The A-level specification in Chemistry encourages students to:

- develop essential knowledge and understanding of different areas of chemistry and how they relate to each other
- develop and demonstrate a deep appreciation of the skills, knowledge and understanding of chemical methods
- develop competence and confidence in a variety of practical, mathematical and problem solving skills.

The initial part of the course will focus on key concepts fundamental to chemistry. The use of mole calculations, atomic structure, bonding and the periodic table are taught in some detail.

The course will then give equal treatment to inorganic, physical and organic chemistry.

**Inorganic chemistry.** Covers in some detail the trends and patterns of the periodic table including the transition metals.

**Organic chemistry.** After an initial introduction to key concepts, covers key reactions and associated mechanisms fundamental to the synthesis of aliphatic and aromatic molecules. The understanding and application of spectroscopic techniques is taught.

The **physical chemistry** content aims to develop the students' knowledge of energy changes, kinetics, equilibria and redox reactions.

Throughout the course industrial applications and their sustainability are also discussed.

Practical skills will be developed and assessed throughout the two year course.

## Assessment Framework:

Total of 6 hours of examinations (2 x 2 hours 15 minutes and 1 x 1 hour 30 minutes) taken at the end of the course. There will be a wide range of question types including multiple choice, short answer and extended response questions.

The assessment of practical skills is achieved through completion of a range of experiments. This leads to a Practical Endorsement which will appear on the student's certificate as a separately reported result, alongside the overall grade for the qualification. The Practical Endorsement does not count towards the final grade.

## Course Entry Requirements:

Chemistry 6 and Maths 6 or Combined Science 6,6 and Maths 6. A 5 may be considered but the final decision will be with the sixth form team.

## Why Study A-level Chemistry?

Chemistry is recommended for the study of medicine, veterinary science, and other medical courses as well as for any science or engineering at university. Chemistry is excellent training for developing logical thought and abstract thinking. These skills are highly valued by employers.