

Chemistry A Level



HEAD OF SUBJECT

Bianca Brunelli

EMAIL ADDRESS

info@gch.org.uk

EXAM BOARD

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COURSE DESCRIPTION

A level Chemistry at The Grey Coat Hospital covers a broad range of study, including practical skills, quantitative chemistry and organic chemistry.

A full overview of the content and assessment of the course is provided overleaf. If you enjoy learning about the structure and properties of matter and are curious about why things happen, then you will very much enjoy this course.



A level Chemistry is a highly respected course and can open doors to a huge range of university courses and future careers.

SKILLS REQUIRED

- Ability to recall information and apply subject knowledge in familiar and unfamiliar contexts;
- Ability to recall equations, change the subject of an equation and convert between units;
- Ability to use a wide range of equipment and techniques, both in the laboratory and in the field;
- Ability to apply investigative techniques, record results accurately and display them in a graphical format;
- Ability to identify and explain trends present in data;
- Ability to identify limitations and suggest improvements to scientific investigations;
- Ability to undertake independent research;

PROGRAMME OF STUDY

Periodic table, elements and physical chemistry:

Development of practical skills in chemistry (M1)

Foundations in chemistry (M2)

Periodic table and energy (M3)

Physical chemistry and transition elements (M5)

Exam paper (100 marks)

2 hours 15 minutes

37% of total A Level

Synthesis and analytical techniques:

Development of practical skills in chemistry (M1)

Foundations in chemistry (M2)

Core organic chemistry (M4)

Organic chemistry and analysis (M6)

Exam paper (100 marks)

2 hours 15 minutes

37% of total A Level

Unified Chemistry

All modules (M1-M6) are assessed

Exam paper (70 marks)

1 hours 30 minutes

26% of total A Level

EXAMINATION RESULTS

In 2021, 9.1% of students were awarded an A* for Chemistry. Overall, students achieved 48.5% A*-A grades and 78.8% A*-C grades. Across the whole 2021 cohort, 29% of students have progressed onto a STEM-related course at university, which is a 3% improvement compared to 2020. Of these students, 41% are now studying a chemistry-related course, including Chemistry, Medicine, Natural Sciences, Pharmacy, Pharmacology and Material Science at a range of universities, including Cambridge, St George's, Manchester, King's College London, University College London and Imperial College London.

PRACTICAL ENDORSEMENT

Students will complete a minimum of 12 practical investigations, including moles determination, acid-base titration, pH measurement and enthalpy determination

Practical skills are assessed in every examination.

ENRICHMENT ACTIVITIES

We offer regular support sessions, also led by King's College London undergraduate students.

We offer incredibly valuable 1-to-1 sessions throughout the year, which are available by appointment at the student's convenience – you only need to book it with your teacher!

Every year, scientists from the Royal Society of Chemistry come to the school to deliver a spectroscopy workshop. This provides the students with the fantastic opportunity to use expensive spectrometers and apply their knowledge to real life scenarios. Every year, we nominate students to represent Chemistry around the school and lead and organise events such as The Great Science Bake Off.

Students have the opportunities to attend lectures presented by a range of speakers from Imperial College London.

FUTURE CAREERS

Studying A Level Chemistry opens doors to a huge range of future courses and careers and is counted as a 'facilitating' subject by the Russell Group of universities.

For most universities, A Level Chemistry is a pre-requisite for studying Medicine. Students go on to study Biochemistry, Chemistry, Chemical engineering, Dentistry, Medicine, Pharmacology and Pharmacy.

Our students have also been awarded positions on a wider range of degree courses, such as Biology, Biomedical Science, Civil engineering, Economics, Modern History, Neuroscience, Politics, Psychology and Theology.

