

Chemistry A Level



HEAD OF SUBJECT

Oliver Vickers

EXAM BOARD

OCR

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 2025 students achieved 28% A*–A grades, 48% A*–B grades, and 72% A*–C grades which is in line with national picture. Across the 2025 chemistry cohort, 71% have gone on to read STEM-related courses at university, including: veterinary medicine, biomedical science, chemistry, material science and engineering, pharmacy, and aerospace engineering. Studying at universities such as University College London, Durham, Manchester, Warwick, Edinburgh, and King's College London.

PRACTICAL ENDORSEMENT

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

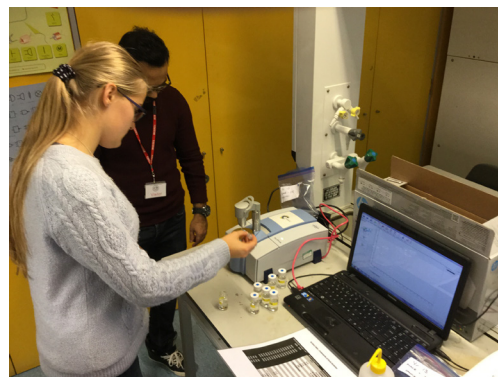
Practical skills are assessed in every examination.

ENRICHMENT ACTIVITIES

We offer a range of extracurricular talks both at the school and in partnership with other local academic providers.

We offer a range of trips, including a Year 12 trip to the 'Chemistry in Action' conference.

Students have the opportunity to partake in both national and international chemistry competitions, including the Chemistry Olympiad and Cambridge Chemistry Challenge.



Students are encouraged to become role models for junior years, supporting clubs such as junior science club and a KS4 mentoring program.

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.