

Curriculum Statement

Year 12 - Chemistry 2025 - 2026

Chemistry

All students study the OCR Chemistry A GCE Specification, which meets the QCA requirements. There are four one hour lessons per week on the timetable, which are taught by Chemistry specialist subject teachers. The full A level is made up of six modules plus a practical endorsement. There are four modules of work to be studied during Year 12. The full course is examined at the end of Year 13.

In Year 12 students study:

- Module one: Development of practical skills in Chemistry
- Module two: Foundations in Chemistry
- Module three: Periodic table and energy
- Module four: Core organic Chemistry and analysis.

Practical skills including planning, implementing, analysis and evaluation feature in all of the modules, the results of which are recorded in students' lab books.

Autumn term

Modules one, two and four

- Practical skills including planning, implementing, analysis and evaluation
- Atoms, compounds, ions and equations
- Amount of substance
- Acid-base and redox reactions
- Electrons, bonding and structure
- Shapes of molecules and intermolecular forces
- Basic concepts in organic Chemistry.

Lent term

Modules one, three and four

- Practical skills including planning, implementing, analysis and evaluation
- The periodic table and periodicity
- Group two and the halogens
- Qualitative analysis
- Hydrocarbons
- Alcohols and haloalkanes.

Summer term

Modules one, three and four:

- Practical skills including planning, implementing, analysis and evaluation
- Organic synthesis
- Analytical techniques (IR and MS)

- Enthalpy changes
- Reaction rates and equilibrium (qualitative)
- Revision of all units for end of year internal examinations.

Throughout the year the progress of the students will be monitored carefully, through homework set, end of topic tests and internal exams.

MASTERY

Students will continue to consolidate previous knowledge from GCSE and throughout year 12 via regular practice and integration of past paper questions. Deeper understanding of the bigger pictures in chemistry is nurtured through the study of fundamental chemistry: chemical identification and quantification, the periodic table and reactivity trends, energy and rates of reaction, and organic identification and synthesis. Practical skills are a fundamental part of the Chemistry course helping to develop critical, independent thinkers that are confident and methodical. Regular formative assessment helps to identify areas for support in learning.

For further information please contact:

Dr Karen Loughran kil@clarescourt.net