



Chemistry

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Course Aims

A-level Chemistry builds upon the knowledge gained at GCSE but goes much further revealing some significant simplifications taught at GCSE. It contains a slightly greater level of mathematical content and overlaps with topics taught in Physics and Biology. By studying Chemistry, students develop many useful skills that can be applied outside of the subject discipline; these include problem solving, numeracy, practical skills as well as developing a broad scientific background. As a result it is a highly respected, useful and often required qualification for higher education and for employment in a wide range of areas.

Qualifications Needed

An APS of 6+ and 6s in GCSE Science (including a 6 in Chemistry/Chemistry components of Triple or Combined Science) and a grade 6 in Mathematics. Students must appreciate this is a hard course. As such, they should be motivated, willing to get involved and have a fundamental interest in Chemistry.

Course Structure

We follow the AQA specification number 7404/7405. Please check the web page link to gain a complete picture of the course.

<http://www.aqa.org.uk/subjects/science/as-and-a-level/chemistry-7404-7405/specification-at-a-glance>

The course is split into 3 sections: Physical Chemistry, Inorganic Chemistry and Organic Chemistry. Below is a list of some of the areas that are covered in these sections:

Physical Chemistry - bonding, equilibria, redox reactions, acids and bases, thermodynamics and kinetics.

Inorganic Chemistry - Group VII reactions, periodicity, transition metals and group 2 metals.

Organic Chemistry - Halogenoalkanes, alcohols, aromatic chemistry, amines, polymerisation and biochemistry.

The end of course exams are split into 3 papers; Paper 1 covers relevant Physical Chemistry and Inorganic Chemistry, Paper 2 covers relevant Physical Chemistry and Organic Chemistry and Paper 3 covers any content studied over the 2 year course and any practical skills covered. Each paper is 2 hours long.

Practical work plays a very important role in this course and practical skills are assessed throughout the 2 years as relevant topics are covered. Students will be awarded a Practical Endorsement following an external exam board moderation during their Year 13 studies.

Complementary Subjects

Chemistry will help in your study of other sciences and technical subjects including: Maths, Physics, Biology, IT, Psychology and Geography. Studying it alongside a Modern Language or an essay subject like History gives students even more options for university courses and careers.

Textbook

AQA A-level Chemistry by Ted Lister and Janet Renshaw
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