



Chemistry

Room: L2

What the Students Say

"The level of support in Chemistry allowed me to get the grades I needed in order to go on and study medicine at university."

"I really enjoy seeing how the theory is put into practice with the practical activities and I always like an opportunity to wear my lab coat!"

"I find my Chemistry lessons really rewarding, they are demanding but I feel a massive sense of pride when it all slots into place"

What Is This Course About?

We provide the AQA A Level Chemistry course (7405). Throughout this course we hope to enable you to extend your understanding of the world around us. Everyday items we take for granted such as washing powders, cosmetics and toiletries were developed with the help of chemists. The topics you will study will help you make the links between what you experience in life and how they have come to exist. Chemistry is an exciting, challenging subject with the potential for significant personal and financial rewards.

What Will I Learn?

Chemistry is split into three disciplines which are spread across the two-year course. Within each discipline there are individual topics.

Physical Chemistry is the branch of chemistry that is concerned with the physical structure of chemical compounds, the amount of energy they have, the way they react with other compounds, and the bonds that hold their atoms together. Topics studied in this area include atomic structure, bonding, kinetics, equilibrium, redox, thermodynamics, and electrochemical cells.

Inorganic Chemistry is the study of the formation, synthesis, and properties of compounds that do not contain carbon hydrogen bonds. Topics in this area are periodicity, group 2 and 7, properties of period 3, transition metals and ions in aqueous solutions.

Organic Chemistry is the study of the structure, properties, composition, reactions, and preparation of carbon-containing compounds. This area will take you through from more simple compounds like alkanes, alkenes and alcohols to the more complex carboxylic acids, amino acids and aromatic compounds. You will also go through their reactions and how to distinguish between them.



Where Will It Take Me?

Chemistry A Level is an important subject to be able to access many areas of study. It is essential for Medicine/Veterinary Science, Scientific/Engineering as well as being very useful for many other careers, for example Biotechnology, Environmental Chemistry, Forensic Science, Law, Military Systems, Oceanography, Oil Industry, Pharmaceuticals, Software Design, Space Exploration.

What Other Opportunities Exist Outside of Class?

We encourage all of our students to join the RSC Chemnet. This network provides information on new discoveries in the field of chemistry as well as access to university departments and student-focussed seminars.

We compete annually in the Royal Society of Chemistry Schools Analyst competition which provides an opportunity to use students' own knowledge to solve a chemical problem.

In addition to this, we have also had the opportunity to attend laboratory sessions at the University of Southampton where students have had the chance for some hands-on lab techniques which would not have been available in the regular school laboratory.