Chemistry A Level

Board: OCR, Specification H433

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The course

Chemistry is a subject of global impact. As a fundamental science it has a profound effect on our planet and is involved in nearly every facet of everyday life. A chemistry qualification isn't just an end in itself, it's a beginning. The range of jobs available to someone with a chemistry qualification is greater than with most other qualifications. The reasons are simple. Chemistry underpins everything in our modern lifestyle and there are few things that we use which have not, at some stage, been made, processed or monitored by chemists. The Salters' chemistry course aims to:

- Emphasise the ways chemistry is applied and the work that chemists do
- Broaden the appeal of chemistry by showing how it relates to people's lives
- Emphasise frontier areas of chemistry
- Include a broad range of teaching and learning activities
- Provide a rigorous and stimulating treatment of chemistry.

The course is organised into teaching units, each of which is freestanding and tells its own story about modern applications of chemistry. This means that the important ideas in chemistry are introduced gradually and are revisited and further developed in different contexts in later units.

In the A Level course you will study ten main topics:

- The Elements of Life is a study of elements and compounds in the universe, the human body and in salt deposits.
- Developing Fuels is a study of fuels, what they consist of, how energy involved in their combustion is measured and the contributions that chemists make to the development of better fuels.
- Elements from the Sea is a study of the extraction of halogens from minerals in the sea, together with a study of the properties and uses of these elements and their compounds.
- The Ozone Story is a study of important processes occurring in the ozone layer of the atmosphere.
- What's in a Medicine is a study of medicines such as aspirin, leading to much functional group chemistry and methods of analysis.
- The Chemical Industry is a study of how chemists use industrial processes to benefit mankind.
- Polymers and Life is a study of condensation polymers, proteins and enzymes, DNA and its use in synthesising proteins.
- Oceans is a study of the role of the oceans in dissolving substances and maintaining pH.
- Developing Metals is a study of the reactions and properties of the transition metals.
- Colour by Design is a study of dyes and dyeing and the use of chemistry to provide colour to order.

Assessment

This is in the form of three written exams.

Foundations of chemistry	2 hours 15 minutes	41% of total A Level
Scientific Literacy in chemistry	2 hours 15 minutes	37% of total A Level
Practical skills in chemistry	1 hour 30 minutes	22% of total A Level

In addition, there is a practical endorsement in chemistry, which is a non-exam assessment. This will require you to complete and submit evidence of 12 practical tasks over the two years of study. It will result in either a pass or fail mark but does not contribute to the A Level mark. Universities offering science courses have said that they will require a pass in order to offer students a place. Students' practical skills will also be reported separately.