

# A Level Chemistry

Examination Board: OCR

Specification Code: H432 – A Level

## Why Chemistry?

The course aims to develop interest in Chemistry in particular, but also in science generally, whilst preparing students for employment or further studies. Confidence in laboratory skills will be developed and safe practice is stressed as being essential. The course also aims to develop the key skills of communication, application of number, working with others, problem solving and information technology. It may be important to note that at many universities, courses in Medicine, Biological Science or Medical Sciences require Chemistry to at least AS Level.

## Entry Requirements

QEHS standard entry requirements will apply and in addition students will be expected to have a grade 6 or above in either GCSE Chemistry or grade 6 in GCSE Combined Science. A grade 6 in Maths is also beneficial.

## Course Content

Learning Activities - the course is practical based. Consequently students can expect one practical per week on average.

### Year 1 covers AS Content which is tested as a mock exam and not an external exam.

- Module 1: Development of practical skills – this module underpins the whole of the specification, and covers the practical skills that students should develop throughout the course. The practical skills in this module can be assessed within written examinations and (for A Level only) within the Practical Endorsement.
- Module 2: Foundations in chemistry covering concepts required throughout the remaining modules.
- Modules 3 (Periodic table & energy) and 4 (Core organic chemistry)

### Year 2

- Module 5: Physical chemistry and transition elements
- Module 6: Organic chemistry and analysis

Examination: Paper 1 (37%, 2hr 15min) assesses the content from Modules 1, 2, 3 and 5 (Periodic table, elements and physical chemistry). Multiple choice and structured questions covering theory and practical skills.

Paper 2 (37%, 2hr 15min) assesses the content from Modules 1, 2, 4 and 6 (Synthesis and analytical techniques). Multiple choice and structured questions covering theory and practical skills.

Paper 3 (26% 1hr 30min) assesses the content from Modules 1 to 6 Unified chemistry. Structured questions and extended response questions covering theory and practical skills.

A Level Practical Endorsement. Non examination. Reported separately PASS/FAIL

Candidates complete a minimum of 12 practical activities to demonstrate practical competence. Performance reported separately to the A Level grade.

## How does learning differ from Pre-16 study?

In Chemistry we find that the students who have well developed, independent study skills cope much better with the big leap in responsibility for their own learning. Students who completed their work and met deadlines at GCSE, prove year on year that they are the most successful at making the transition to A Level.

Specifically the course relies heavily on skills developed at GCSE in understanding mathematical principles and explaining concepts in terms of the particle model. Being able to modify old ideas based on new information as well as handle abstract concepts are essential. There are a lot of fundamental concepts to learn in chemistry, and these need to be able applied to a range of problems, if you do not practice these skills independently you will not be successful on the course. If you are not sure which science is best for you to study please talk to your science subject teachers or Mrs Medcalf as Head of Science.

## Prospects

Chemistry is an essential requirement for applications in medicine, dentistry and veterinary studies. Beyond A Level, you might expect to move into careers in almost anything. It is a highly regarded qualification and if you can succeed in Chemistry you can put your mind to anything.

## Contacts

Please contact Dr. S. Horgan, Head of Chemistry, if you wish to discuss this qualification further.