OCR A-LEVEL CHEMISTRY

COURSE CONTENT AND AIMS

The 'A' Level Chemistry course covers a wide variety of Physical, Inorganic and Organic Chemistry topics designed to build on work covered at GCSE and to form an excellent basis for further study. As well as enhancing students' knowledge of Chemistry the course aims to develop analytical and problem solving skills as well as practical technique. The new specification from 2015 reflects the changing face of Chemistry in academia and in industry, the content of the course reflects new advances in analytical techniques as well as an increased focus on applications of Chemistry in medical and pharmaceutical contexts.

Physical Chemistry
Topics include atomic structure, bonding, rates of reaction, acids and pH, chemical equilibrium and thermodynamics.

Inorganic Chemistry
Topics are related to understanding patterns in the Periodic Table, complex ions and chemical tests.

Organic Chemistry
Topics are related to homologous series such as carboxylic acids and amines, polymer structures and analytical techniques used in identifying organic compounds.

'A' Level Chemistry has strong links with the other Sciences and Mathematics and we recommend that students aim to take one or more of these complimentary subjects along with Chemistry.

TEACHING AND LEARNING STYLES

Lessons are always varied, incorporating individual and group practicals. Theoretical work often includes discussions and students are expected to carry out individual research to further their understanding of the topics. Each week, students can expect to receive set tasks for homework or revision but in addition are expected to spend at least two hours of non-directed time performing their own independent note-making and study.

ASSESSMENT

Both AS and 'A' Level courses are linear qualifications. The AS Chemistry qualification is assessed over two papers: one covering Inorganic and Physical Chemistry and one covering Organic and Physical Chemistry. Both papers are 90 minutes long and are equally weighted; both papers consist of a mixture of long answer, short answer and multiple choice questions.

'A' Level Chemistry is assessed over three separate papers: Paper 1 covers topics in Inorganic and Physical Chemistry, Paper 2 covers topics in Organic and Physical Chemistry; these two papers are

each worth 35% of the final A-level qualification and comprise of a mixture of long and short answer questions. Paper 3 assesses practical skills, data handling and synoptic knowledge of the course; it is worth 30% of the total ‘A’ Level qualification. Each of the ‘A’ Level Chemistry exam papers will be two hours 15 in length.

Practical skills no longer count towards the Chemistry ‘A’ Level qualification and instead form a standalone certification. The exam board dictates a set list of practical techniques students will need to be able to demonstrate throughout the year in order to be awarded this additional certificate.

HIGHER EDUCATION AND CAREER OPPORTUNITIES

An ‘A’ Level qualification in Chemistry is an indicator of a student’s higher level reasoning skills as well as their possessing an excellent grasp of abstract concepts. Higher qualifications in Chemistry are widely sought after and studying Chemistry is the basis for a variety of opportunities, including careers in Medicine, Pharmacy, Veterinary Medicine, Forensic Science, Agricultural and Environmental Science and Engineering. It also opens doors to careers in Finance, Law and Accountancy.
As well as being an essential ‘A’ Level for those who wish to study Chemistry at a higher level it is also a required subject for those students who wish to study Medicine, Dentistry, Veterinary Medicine, Chemical Engineering, Pharmacy and Biochemistry at University.