



PARK HIGH SCHOOL

Chemistry

Exam Board: OCR

Course Specification: H432

Qualification obtained: OCR A Level in Chemistry

Lead Teacher: Miss Selva

Email: rselvarajah.310@parkhighstanmore.org.uk

Subject Overview:

Chemistry A – a content-led approach. A flexible approach where the specification is divided into topics, each covering different key concepts of chemistry. Teaching of practical skills is integrated with the theoretical topics and they are assessed both through written papers and, for A Level only, the Practical Endorsement. OCR's A Level in Chemistry A specification aims to encourage learners to:

- Develop essential knowledge and understanding of different areas of the subject and how they relate to each other
- Develop and demonstrate a deep appreciation of the skills, knowledge and understanding of scientific methods
- Develop competence and confidence in a variety of practical, mathematical and problem-solving skills
- Develop their interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with the subject
- Understand how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society

Assessment percentage Exam: 100%

Progression Routes:

Chemistry is one of the most highly respected subjects by employers and universities. It teaches students a range of different skills that are transferable to many different situations. Some chemistry students have gone on to be Doctors, Lawyers, Engineers, Accountants, Bankers, Pharmacists and many more careers.

Subject requirements:

- Grade 6 in Chemistry and a 6 in at least one of the other of the Separate Sciences at OR Grade 6-6 in Combined Science
- Grade 4 in English Language
- Grade 4 in English Literature
- Grade 5 in Mathematics

Complementary learning:

- Physics
- Biology
- Mathematics

Student Quotes:

"Chemistry has provided me with the opportunity to understand how different reactions work at a molecular level and this has allowed me to solve problems by looking at things in many different logical ways."

"Doing practicals to understand our classwork is what makes Chemistry so interesting. Chemistry is so fun and doing it for A-Levels has made me so satisfied."

Year 12

A Level Chemistry is split into six modules which are taught over the course Year 12 & 13.

Topics covered:

- Module 1: Development of practical skills in chemistry
- Module 2: Foundations in chemistry
- Module 3: Periodic table and energy
- Module 4: Core organic chemistry and analysis

Year 13

A Level Chemistry is split into six modules which are taught over the course Year 12 & 13.

Topics covered:

- Module 1: Development of practical skills in chemistry
- Module 5: Physical chemistry and transition elements
- Module 6: Organic chemistry and analysis

Assessment

Is 100% Exam. There are three separate exams (Component 1, 2 & 3) that are sat at the end of Year 13.

Unit Code	Unit Title	Assessment Details	Weighting
Component 01	Periodic table, elements and physical chemistry	Written examination in Year 13: 100 mark paper, 2hr 15min	37%
Component 02	Synthesis and analytical techniques	Written examination end of Year 13: 100 mark paper, 2hr 15min	37%
Component 03	Unified chemistry	Written examination end of Year 13: 100 mark paper, 1hr 30min	26%
Component 04	Practical Endorsement in chemistry	non exam assessment	Reported separately

Additional information

Course specific equipment:

A Lab coat is required for all practical lessons in Biology and Chemistry. (This can be bought locally from Workwear World Ltd., 441-445 Honeypot lane, Stanmore. Approx. cost £16.)

Essential Reading Material:

OCR A Level Chemistry A Student Book 1 (ISBN 9781447976509)

OCR A Level Chemistry A Student Book 2 (ISBN 9781447990819)

Recommended resources:

<http://www.chemguide.co.uk/>

<http://www.rsc.org/>

Enrichment:

Chemistry in Action – a day of Chemistry lectures delivered by university researchers. (£20) UCL Science Lectures for Sixth Formers cover a variety of scientific disciplines, including Chemistry. (admission free)