

**Subject:** Chemistry

**Exam Board:** OCR

**Course Number:** H432

**Course 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're 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

**How is this A Level assessed?:**

Unit Code	Unit Title	Guided Learning Hours	Term when will this be taught (2 yr course)	Assessment Details	Assessment Weighting
Module 1	Development of practical skills in chemistry		throughout	Periodic table, elements and physical chemistry (01) 100 marks	37%
Module 2	Foundations in chemistry	41	Autumn Y12	2 hours 15 minutes written paper Assesses content from <b>modules 1,2,3 and 5</b>	
Module 3	Periodic table and energy	41	Autumn/Spring Y12	Synthesis and analytical techniques (02) 100 marks	37%
Module 4	Core organic chemistry	45	Spring Y12	2 hours 15 minutes written paper Assesses content from <b>modules 1,2,4 and 6</b>	
Module 5	Physical chemistry and transition elements	66	Autumn Y13	Unified chemistry (03) 70 marks 1 hour 30 minutes written paper Assesses content from <b>all modules</b>	26%
Module 6	Organic chemistry and analysis	70	Spring Y13	Practical Endorsement in chemistry (04) (non exam assessment)	Reported separately

**GCSE grades (minimum) required to enrol on this course:**

- 6 in Chemistry and a 6 in at least one of the other Sciences if studied Separate Science at GCSE
- OR**
- 6-6 in Combined Science
  - 5 in Mathematics
  - 4 in English Language

**What can I do with this qualification/Post-18 progression opportunities/ university subjects which this course supports?:**

The A Level Chemistry course will prepare learners for progression to undergraduate courses in Chemistry, Biochemistry, Medicine, Dentistry, Engineering, Pharmacy, one of the other sciences or related subjects. For learners wishing to follow an apprenticeship route or those seeking direct entry into chemical science careers, this A level provides a strong background and progression pathway.

**Other A Level Subjects which support academic attainment/ complement learning**

Physics, Biology and Mathematics

**Essential Textbook incl ISBN**

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

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

**Recommended supplementary resources- websites, blogs, journals:**

**[www.chemguide.co.uk](http://www.chemguide.co.uk)** Online textbook with lots of extra (but useful) information. Step by step instructions and explanations.

**[www.rsc.org](http://www.rsc.org)** Royal Society of Chemistry website contains a huge bank of resources for Chemistry students (LearnChemistry), including videos, games and on-line tutorials, as well as information on careers and news about the chemical research and industry.

**Course specific equipment- include place to purchase and typical cost or estimate:**

Labcoat – approx. £15 (available from many outlets, eg Workwear World, 445 Honeypot Lane)

Scientific calculator

**Out of lesson learning including trips and visits (cost?):**

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)

**Lead Teacher to contact:** Joe Pich

Email: [jpich.310@parkhighstanmore.org.uk](mailto:jpich.310@parkhighstanmore.org.uk)

**Quote from current student- include their name:**

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. – Mathangi Sivasundar