Switching to OCR A from AQA

The content within the OCR Chemistry A specification covers the key concepts of chemistry and will be very familiar. We've laid it out in a logical progression to support co-teaching the AS Level and teaching the A Level in a linear way.

OCR Chemistry A (H032/H432)	**AQA (7404/7405)** *(* – topic is split)*
Module 1: Development of practical skills in chemistry Practical skills assessed in a written examination and Practical skills assessed in the practical endorsement	The same practical skills, as mandated by the DfE, are listed in Chapter 7 and 8 of the AQA specification.
Module 2 – Foundations in chemistry Atoms, compounds, molecules and equations Amount of substance Acid–base and redox reactions Electrons, bonding and structure	3.1.1 Atomic structure 3.1.2 Amount of substance 3.1.3* Bonding 3.1.7 Oxidation, reduction and redox equations
Module 3 – Periodic table and energy The periodic table and periodicity Group 2 and the halogens Qualitative analysis Enthalpy changes Reaction rates and equilibrium (qualitative)	3.1.3* Bonding 3.1.4 Energetics 3.1.5 Kinetics 3.1.6 Chemical equilibria and Le Chatelier's principle 3.2.1 Periodicity 3.2.2 Group 2, the alkaline earth metals 3.2.3 Group 7(17), the halogens 3.2.4 Properties of Period 3 elements and their oxides (not Period 3 oxides)
Module 4 – Core organic chemistry Basic concepts Hydrocarbons Alcohols and haloalkanes Organic synthesis Analytical techniques (IR and MS)	3.3.1 Introduction to organic chemistry 3.3.2 Alkanes 3.3.4 Alkenes 3.3.3 Halogenoalkanes 3.3.5 Alcohols 3.3.6 Organic synthesis

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Module 5 – Physical chemistry and transition elements Reaction rates and equilibrium (quantitative) pH and buffers Enthalpy, entropy and free energy Redox and electrode potential Transition elements	3.1.8 Thermodynamics 3.1.9 Rate equations 3.1.10 Equilibrium constant *K*p for homogeneous systems 3.1.11 Electrode potentials and electrochemical cells 3.1.12 Acids and bases 3.2.5 Transition metals 3.2.6 Reaction of ions in aqueous solution
Module 6: Organic chemistry and analysis Aromatic compounds Carbonyl compounds Carboxylic acids and esters Nitrogen compounds Polymers Organic synthesis Chromatography and spectroscopy (NMR)	3.3.7 Optical isomerism 3.3.8 Aldehydes and ketones 3.3.9 Carboxylic acids and derivatives 3.3.10 Aromatic chemistry 3.3.11 Amines 3.3.12 Polymers 3.3.13 Amino acids, proteins and DNA 3.3.14 Organic synthesis 3.3.15 Nuclear magnetic resonance spectroscopy 3.3.16 Chromatography
Appendix 5e: Mathematical requirements Arithmetic and numerical computation Handling data Algebra Graphs Geometry and trigonometry	**Chapter 6: Mathematical requirements and exemplifications** Arithmetic and numerical computation Handling data Algebra Graphs Geometry and trigonometry

Assessment – AS Level

OCR Chemistry A (H032)	AQA (7404)
AS Paper 1: Breadth in chemistry Modules 1–4 70 marks, 50% of AS Level Written paper – 1 hour 30 minutes Section A multiple choice questions, 20 marks. Section B short answer question styles (structured questions, problem solving, calculations, practical) and extended response questions, 50 marks.	**AS Paper 1: Inorganic and Physical Chemistry: Sections 3.1.1–3.1.4, 3.1.6, 3.1.7, 3.2.1–3.2.3 and relevant practical skills** 80 marks , 50% of AS Level Written paper – 1 hour 30 minutes 65 marks of short and long answer questions; 15 marks of multiple choice questions.
AS Paper 2: Depth in chemistry Modules 1–4 70 marks, 50% of AS Level Written paper – 1 hour 30 minutes Question styles include short answer (structured questions, problem solving, calculations, practical) and extended response questions, including those marked using Level of Response mark schemes.	**AS Paper 2: Organic and Physical Chemistry: Sections 3.1.2–3.1.6, 3.3.1–3.3.6 and relevant practical skills** 80 marks, 50% of AS Level Written paper – 1 hour 30 minutes 65 marks of short and long answer questions; 15 marks of multiple choice questions.

Assessment – A Level

OCR Chemistry A (H432)	AQA (7405)
A Level Paper 1: Periodic table, elements and physical chemistry **Modules 1, 2, 3 & 5** 100 marks, 37% of A Level Written paper – 2 hours 15 minutes Section A multiple choice questions, 15 marks. Section B short answer question styles (structured questions, problem solving, calculations, practical) and extended response questions, 85 marks.	**A Level Paper 1: Inorganic and Physical Chemistry: Sections 3.1.1–3.1.4, 3.1.6–3.1.8, 3.1.10–3.1.12, 3.2 and relevant practical skills** 105 marks, 35% of A Level Written paper – 2 hours Short and long answer questions.
A Level Paper 2: Synthesis and analytical techniques, Modules 1, 2, 4 & 6 100 marks, 37% of A Level Written paper – 2 hours 15 minutes Section A multiple choice questions, 15 marks. Section B includes short answer question styles (structured questions, problem solving, calculations, practical) and extended response questions, 85 marks.	**A Level Paper 2: Organic and Physical Chemistry: Sections 3.1.2–3.1.6, 3.1.9, 3.3 and relevant practical skills** 105 marks, 35% of A Level Written paper – 2 hours Short and long answer questions.
A Level Paper 3: Unified chemistry **Modules 1–6** 70 marks, 26% of A Level Written paper – 1 hour 30 minutes Question styles include short answer (structured questions, problem solving, calculations, practical) and extended response questions.	**A Level Paper 3: Chemistry: Any content and any practical skills** 90 marks, 30% of A Level Written paper – 2 hours Practical techniques and data analysis, 40 marks. Questions testing across the specification, 20 marks. Multiple choice questions, 30 marks.

OCR Chemistry A (H432)	AQA (7405)
Practical Endorsement in chemistry Separately reported non–exam assessment, with candidates demonstrating competence in a range of skills and techniques, in a minimum of 12 assessed practical activities. Teacher assessment against the Common Practical Assessment Criteria.	**Practical Endorsement in chemistry** Separately reported non–exam assessment, with candidates demonstrating competence in a range of skills and techniques, in a minimum of 12 assessed practical activities. Teacher assessment against the Common Practical Assessment Criteria.