Science Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Particle Model and Separating Mixtures	Cells and Movement Energy Costs and Transfers	Digestion and breathing	Elements and Compounds	Forces and Pressure	Ecosystems: interdependence and plant reproduction
Year 8	Waves	Acids and Alkalis	Variation and Evaluation	Electricity and Magnetism	Earth Structure and Climate Universe	Reproduction (Human)
Year 9	Physical and chemical changes Particle model	Particle model Cells	Cells Inheritance	Atoms and Periodic Table Energy	Energy Photosynthesis and Respiration	Photosynthesis and Respiration
Year 10	Bio: Cells Chem: Structure and Bonding Phy: Energy	Bio: Organisation Chem: Quantitative Chemistry, Chemical Changes Phy: Electricity	Bio: infection Chem: Chemical Changes Phy: Particle Model	Bio: infection/bioenergetics Chem: Energy Changes Phy: Atomic Structure	Bio: Ecology Chem: Chemistry of the Atmosphere Phy: Forces	Bio: Ecology Chem: Rates of Reaction and Equilibrium Phy: Forces
Year 11	Bio: Homeostasis and response Chem: Rates of Reaction and Equilibrium Phy: Forces for Combined Forces for Separate	Bio: Homeostasis and response Chem: Organic Chemistry Phy: Waves for Combined Waves for Separate	Bio: Inheritance, variation and evolution Chem: Chemical Analysis and Using resources Phy: Electromagnetism for combined Waves for Separate	Bio: Inheritance, variation and evolution Chem: Revision for combined Using resources for Separate Phy: Revision for combined Electromagnetism and space for Separate	Bio: Inheritance, variation and evolution, revision Chem: Revision Phy: Revision	

A Level Biology

Year 12	Biological molecules Cells	Biological molecules Cells	Gas exchange Genetic information, variation and relationships between organisms	Mass transport Genetic information, variation and relationships between organisms	Energy and ecosystems Populations in ecosystems	Energy and ecosystems Populations in ecosystems
Year 13	Photosynthesis Genetics, populations, evolution and ecosystems	Respiration Responding to stimuli Inherited change The control of gene expression	Nervous system and muscles The control of gene expression	Homeostasis The control of gene expression	Revision	

A Level Chemistry

	Atoms and reactions	Atoms and reactions	Physical Chemistry	Basic Concepts and	Basic Concepts and	Aromatic Compounds
	Electrons Bonding and	Physical Chemistry	The Periodic Table	Hydrocarbons	Hydrocarbons	Analysis
Year 12	Structure	Electrons Bonding and		Alcohols, Haloalkanes and	Alcohols, Haloalkanes and	
		Structure		Analysis	Analysis	
		The Periodic Table				
	Aromatic Compounds,	Nitrogen Compounds,	Nitrogen Compounds,	Transition Metals	Revision	
	carbonyls and acids	polymers, and Synthesis	polymers, and Synthesis	Rates, Equilibrium and PH		
Year 13	Analysis	Energy	Redox and Electrode	Redox and Electrode		
	Energy	PH	potentials and PH	potentials		
	Rates, Equilibrium					

A Level Physics

	Electrons, Waves and	Electrons, Waves and	Electrons, Waves and	Electrons, Waves and	Newtonian World and	Newtonian World and
	Photons	Photons	Photons	Photons	Astrophysics	Astrophysics
Year 12	AND	AND	AND	AND		
	Forces and Motion	Forces and Motion	Forces and Motion	Forces and Motion		
	Newtonian World and	Newtonian World and	Particles and medical physics	Particles and medical physics	Revision	
	Astrophysics	Astrophysics				
Year 13		AND				
		Particles and medical physics				

Texts and exam boards

Year 7- 9	Year 10-11	Year 12-13
Core texts OUP AQA Activate Book 1 (ISBN: 978-0-19-840824-6) OUP AQA Activate Book 2 (ISBN: 978-0-19-840825-3) Students have access to digital versions of these textbooks via Kerboodle.	Exam board AQA GCSE Combined Science: Trilogy (specification here) AQA GCSE Biology (specification here) AQA GCSE Chemistry (specification here) AQA GCSE Physics (specification here) Combined Science Core texts Biology for GCSE Combined Science: Trilogy (ISBN:978-0-19-835926-5) Chemistry for GCSE Combined Science: Trilogy (ISBN:978-0-19-835927-2) Physics for GCSE Combined Science: Trilogy (ISBN:978-0-19-835928-9) Separate Science Core texts AQA GCSE Biology (ISBN: 978-0-19-835937-1) AQA GCSE Chemistry (ISBN: 978-0-19-835938-8) AQA GCSE Physics (ISBN: 978-0-19-835939-5) Students have access to digital versions of these textbooks via Kerboodle.	Exam board AQA A Level Biology (7402) (specification here) OCR A Level Chemistry A (H432) (specification here) OCR A Level Physics A (H556) (specification here) Core texts OUP A Level Biology for AQA (ISBN: 978 0 19 835177 1) OUP A Level Chemistry for OCR A (ISBN: 978 0 19 835197 9) OUP A Level Physics for OCR A (ISBN: 978 0 19 835218 1) Students have access to digital versions of these textbooks via Kerboodle.