Sixth Form Subject Information

Chemistry

Qualification	A-Level	
Exam Board	Edexcel	
Course Leader	Miss Stifanelli / Mr Sadler	
Course summary	The course is broken down into 3 strands – organic, inorganic and physical chemistry. Each section of the course begins with an overview, which puts the topic into a broader chemical context and encourages understanding of the place of each topic within the subject. The course is designed to inspire students, nurture their passion for chemistry and lay the foundations for further study and the workplace.	
What will students learn?	**Yr 12 content**	Pupils will learn about: • The Scientific Process • Atomic Structure + The Periodic table • Amount of substance • Bonding + Structure • Redox Reactions • Inorganic Chemistry + The Periodic Table • Testing for Ions • Energetics • Chemical equilibria , Le Chatelier's Principle and K_c • Organic Chemistry including alkanes, halogenoalkanes, alkenes, alcohols, polymers, crude oil, isomerism and organic analysis • Group 2 and Group 7 elements • Modern Analytical Techniques • Kinetics • Equilibrium • Practical Skills
	Yr 13 content	Pupils will learn about: • Acid-Base Equilibria • Energetics II (Building on Year 12 content) • Redox II (Building on Year 12 content) • Equilibrium II (Building on Year 12 content) • Chemistry of Group 3 and their oxides • Transition metals • Organic chemistry II (Building on Year 12 content) aldehydes and ketones, carboxylic acids, amines, aromatic chemistry, optical isomerism and further organic analysis • Modern Analytical Techniques II (NMR Spectroscopy, Chromatography, High resolution Mass Spectroscopy and Proton NMR) • Thermodynamics • Rate equations

		• Acids and bases
How will students be assessed?	Pupils will be assessed through three exams: Paper 1: Advanced Inorganic and Physical Chemistry – Contributing to 30% of the total qualification. Paper 2: Advanced Organic and Physical Chemistry – Contributing to 30% of the total qualification. Paper 3: Paper 3: General and Practical Principles in Chemistry – Contributing to 40% of the total qualification. There is no longer a coursework element, however pupils will need to complete at least 6 core practical's in each of the two years to count towards a practical skills qualification. Theoretical knowledge of practical skills will also be assessed throughout the three papers sat.	
Differentiation	Students have access to exam questions throughout the course to help them practice the application of knowledge and understanding. Regular FAB tasks with feedback every 6 – 8 lessons to allow students to keep track of their progress. Microsoft TEAMS, all PowerPoints used in lessons and extra revision can be accessed. Independent study programme – Which encourages students to read around the subject.	
Resources	Edexcel AS/A Level Chemistry Student Book 1 ISBN: 1447991168 Edexcel A Level Chemistry Student Book 2 ISBN: 1447991176 www.chemguide.co.uk www.allerytutors.co.uk	