

Chemistry at Samuel Whitbread Academy

Curriculum Sequencing

Year 12& 13:

Weighting (%)	AS		A2		
	Paper 1	Paper 2	Paper 1	Paper 2	Paper 3
3.1 Physical chemistry	50	50	35	35	30
3.1.1 Atomic structure					
3.1.2 Amount of substance					
3.1.3 Bonding					
3.1.4 Energetics					
3.1.5 Kinetics					
3.1.6 Chemical equilibria, Le Chatelier's principle and K _c					
3.1.7 Oxidation, reduction and redox equations					
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 Inorganic chemistry					
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					
3.2.5 Transition metals					
3.2.6 Reactions of ions in aqueous solution					
3.3 Organic chemistry					
3.3.1 Introduction to organic chemistry					
3.3.2 Alkanes					
3.3.3 Halogenoalkanes					
3.3.4 Alkenes					

3.3.5 Alcohols
3.3.6 Organic analysis
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

