



AS and A-level Chemistry A - H032, H432

## **Curriculum Overview**

At ICC we follow the OCR Chemistry A AS and A-level Specification. The curriculum is sequenced to be delivered by two members of teaching staff and each unit is mapped to the big ideas from our KS3 and KS4 curriculum. Each unit is assessed with end of topic summative assessments as well as half termly cumulative assessments and formative assessment throughout the course ensures retrieval of relevant content and supports students in making synoptic links. Opportunities to consider rich questions and reference to futures are made where relevant throughout the course in order to help our students understand the present and plan for their own future.

Link to the specification

Link to the scheme of work

		Teacher 1			Teacher 2		
		Topics	Practical's	Big idea	Topics	Practical's	Big idea
Autumn Term	First half	5.1.2 How far? 5.1.3 Acids, bases and buffers	Acids, bases and indicators	REACTIONS	6.12 Carbonyl compounds 6.1.3 Carboxylic acids and esters	Reactions of carbonyl compounds Reactions of carboxylic acids	MATTER REACTIONS
	Second half	5.1.3 Acids, bases and buffers 5.2.3 Redox and electrode potentials	PAG 11.1; Finding X in CuSO4.xH2O (iodine/thiosulphate titration); Studying redox reactions (practical 5)	SA. REACTIONS	6.2.1 Amines 6.2.2 Aminoacids, amides and chirality	PAG 6.2 (Parts 1+2)	( <del>)</del> MATTER
Spring Term	First half	5.2.3 Redox and electrode potentials 5.3.1 Transition elements	Electrode potentials and measuring cell emf; PAG 8.1; Complex formation & competition for cations (practical 12)	SA REACTIONS	<ul><li>6.2.3 Polyesters and polymides</li><li>6.2.4 Carbon-carbon bond</li><li>formation</li><li>6.2.5 Organic synthesis</li></ul>	Nylon preparation Preparation of aspirin	( <del>)</del> MATTER
	Second half	<ul> <li>5.3.1 Transition elements</li> <li>5.3.2 Qualitative anaylisis +</li> <li>redox reactions</li> <li>5.2.1 Lattice enthalpy</li> </ul>	PAG 12.1	SA. REACTIONS	6.2.5 Organic synthesis 6.3.1 Chromatography and qualitative analysis	PAG 6.2 (part 3)	(1) SA
Summer Term	First half	5.2.2 Enthalpy and entropy Revision	Finding enthalpy changes of solution (practical 9)	SA. REACTIONS	6.3.2 Spectroscopy Revision		SA. REACTIONS
	Second half	Revision			Revision		