A Level Chemistry

CURRICULUM MAP

Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less.

Teacher 1

Autumn	Spring	Summer
Module 2: Foundations in chemistry	**Module 3: Periodic table and energy**	**Module 5: Physical chemistry and transition elements**
•2.1.1 Atomic structure and isotopes •2.1.2 Compounds, formulae and equations •2.1.3 Amount of substance •2.1.4 Acids	•3.1.1 Periodicity •3.1.2 Group 2 •3.1.3 The halogens •3.2.1 Enthalpy changes •3.2.2 Reaction rates •3.2.3 Chemical equilibrium	•5.1.1 How fast?
Module 1 taught and assessed throughout		

Teacher 2

Autumn	Spring	Summer
Module 2: Foundations in chemistry	**Module 4: Core organic chemistry** **Section 4.1: Basic concepts and hydrocarbons**	**Module 4: Core organic chemistry** **Section 4.2: Alcohols, haloalkanes and analysis**
•2.2.1 Electron structure •2.2.2 Bonding and structure •2.1.5 Redox	•4.1.1 Basic concepts of organic chemistry •4.1.2 Alkanes •4.1.3 Alkenes	•4.2.1 Alcohols •4.2.2 Haloalkanes •4.2.3 Organic synthesis •4.2.4 Analytical techniques
Module 1 taught and assessed throughout		

Specification overview

Content overview

Module 1 – Development of practical skills in chemistry

Module 2 – Foundations in chemistry

Module 3 – Periodic table and energy

Module 4 – Core organic chemistry

Module 5 – Physical chemistry and transition elements

Module 6 – Organic chemistry and analysis

Assessment overview

Paper 1 – Periodic table, elements and physical chemistry 100 marks 2 hours 15 minutes written paper	Assesses modules 1, 2, 3 and 5	37% of total A-level
Paper 2 – Synthesis and analytical techniques 100 marks 2 hours 15 minutes written paper	Assesses modules 1, 2, 4 and 6	37% of total A-level
Paper 3 – Unified chemistry 70 marks 1 hour 30 minutes written paper	Assesses modules 1 to 6	26% of total A-level

Non-exam assessment – practical endorsement in chemistry – pass/fail

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	Autumn	Spring	Summer
Teacher 1	**Module 5: Physical chemistry and transition elements** **Section 5.1: Rates, equilibrium and pH**	**Module 5: Physical chemistry and transition elements** **Section 5.2: Energy**	**Module 5: Physical chemistry and transition elements** **Section 5.3: Transition elements**
	•5.1.2 How far? •5.1.3 Acids, bases and buffers	•5.2.1 Lattice enthalpy •5.2.2 Enthalpy and entropy •5.2.3 Redox and electrode potentials	•5.3.1 Transition elements •5.3.2 Qualitative analysis
	Module 1 taught and assessed throughout		

	Autumn	Spring	Summer
Teacher 2	**Module 6: Organic chemistry and analysis** **Section 6.1: Aromatic compounds, carbonyls and acids**	**Module 6: Organic chemistry and analysis** **Section 6.2: Nitrogen compounds, polymers and synthesis**	**Module 6: Organic chemistry and analysis** **Section 6.3: Analysis**
	•6.1.1 Aromatic compounds •6.1.2 Carbonyl compounds •6.1.3 Carboxylic acids and esters	•6.2.1 Amines •6.2.2 Amino acids, amides and chirality •6.2.3 Polyesters and polyamides •6.2.4 Carbon-carbon bond formation •6.2.5 Organic synthesis	•6.3.1 Chromatography and qualitative analysis •6.3.2 Spectroscopy
	Module 1 taught and assessed throughout		

Revision resources

Physicsandmathstutor.com
Module 1 – Development of practical skills in chemistry
Module 2 – Foundations in chemistry
Module 3 – Periodic table and energy
Module 4 – Core organic chemistry
Module 5 – Physical chemistry and transition elements
Module 6 – Organic chemistry and analysis

Additional resources	
Machemguy Youtube channel	Revision videos, exam question walkthroughs, exam tips
Knockhardy	Notes and PowerPoints
OCR specification	The OCR Chemistry A specification – as referred to across this curriculum map
Core questions	Practice Q&A – a work in progress, will continually be updated
Save my exams	Revision notes, topic questions and past papers
Chemguide	Extensive notes which go beyond the course