



Post 16 Prospectus: CHEMISTRY

Advanced Subsidiary (AS) & Advanced Level (A2)
Examining Board: AQA

AIM

The aim of the course: To develop an advanced knowledge of the fundamental concepts of Chemistry along with a range of practical skills through context based learning. Ideas are introduced in a spiral way with an emphasis on an investigational and problem solving approach.

COURSE CONTENT

AS Level (Stand-alone AS Exam)		Advanced Level (Decoupled Exam)	
1	Atomic structure	1	All AS topics along with:
2	Amounts of substance	2	Thermodynamics and kinetics
3	Bonding	3	Equilibrium constant K_p
4	Energetics and kinetics	4	Electrode potentials and electrochemical cells.
5	Equilibria	5	Acids, bases and buffers
6	Redox chemistry	6	Periodicity, transition metals
7	Periodicity, gp 2 & gp 7 chemistry	7	Reactions of inorganic compounds in solutions
8	Alkanes & halogenalkanes	8	Organic nomenclature and isomerism
9	Alkenes and alcohols	9	Carbonyl, aromatic and amine chemistry
10	Organic analysis	10	Polymerisation, amino acids, proteins and DNA
		11	Organic synthesis and analysis
		12	Structure determination and chromatography
AS ASSESSMENT		A2 ASSESSMENT	
Paper 1 (80 marks, 1 hr 30 min written paper) 50% of AS Level		Paper 1 (105 marks, 2hr written paper) 35% of A Level	
Paper 2 (80 marks, 1 hr 30 min written paper) 50% of AS Level		Paper 2 (105 marks, 2hr written paper) 35% of A level	
		Paper 3 (90 marks, 2 hr written paper) 30% of A Level	
		Practical Endorsement in Chemistry On-going assessment over the two-year course of practical skills and reported as a separate certificate.	

SUBJECT ENRICHMENT

Visit to an industrial site during the summer term of year 1 and various opportunities to enter national and international Chemistry competitions. Ongoing project with the Royal Society.



Post 16 Prospectus: CHEMISTRY

Advanced Subsidiary (AS) & Advanced Level (A2)
Examining Board: AQA

SUBJECT SPECIFIC ENTRY REQUIREMENTS

Grade 6 in Separate Chemistry or 6-6 in Science Trilogy and a Grade 6 in Maths.

WHERE NEXT?

Most of our students go on to study science based degrees, including: medicine, veterinary science, dentistry, pharmacy, biochemistry, engineering and chemical engineering, natural sciences, chemistry, biology and physics. Examples of recent successes:

Student 1: Chemical Engineering at Cambridge A* in chemistry

Student 2: - Chemistry at Bath A* in chemistry

Student 3: Medicine at Oxford with A* in chemistry

STUDENT SUPPORT

- A peer-to-peer mentoring scheme, year 13 students help support and develop a small group of year 12 students.
- Weekly drop-in sessions for students with specific queries.
- Entries to a range of UK-wide competitions including the Chemistry Olympiad and The Cambridge Chemistry Challenge.
- Good links with several chemistry lecturers at Bradford University including outreach projects such as spectroscopy in a suitcase.