

Chemistry AS and A-Level

Exam Board: AQA

Summary of course content Chemistry AS

Qualification	Modules studied	
AS Chemistry 1 year <u>stand alone course</u> . Co-taught with the 1 st year of the A-level. Does NOT contribute to final A-level grade.	Physical chemistry	Atomic structure Amount of substance Bonding Energetics Kinetics Chemical equilibrium
	Inorganic chemistry	Trends of the periodic table Group 2 the alkaline earth metals Group 7 the halogens
	Organic chemistry	Introduction to organic chemistry Alkanes Halogenoalkanes Alkenes Alcohols Organic analysis.

Summary of assessment scheme

AS Chemistry Exams

Content	Assessment	Questions
Paper 1 <ul style="list-style-type: none">Inorganic chemistry, with relevant physical chemistryRelevant practical skills	Written exam: 1 hour 30 minutes <ul style="list-style-type: none">80 marks50% of AS	<ul style="list-style-type: none">65 marks: a mixture of short and long answer questions15 marks: multiple choice questions
Paper 2 <ul style="list-style-type: none">Organic chemistry, with relevant physical chemistryRelevant practical skills	Written exam: 1 hour 30 minutes <ul style="list-style-type: none">80 marks50% of AS	<ul style="list-style-type: none">65 marks: a mixture of short and long answer questions15 marks: multiple choice questions

Summary of course content Chemistry A-Level

Qualification	Modules studied	
A-level Chemistry Linear assessment, with <u>all exams</u> at the end of the 2 year course. The AS Chemistry grade <u>no longer contributes</u> to this qualification.	Physical chemistry	AS content plus: Thermodynamics Rate equations Equilibrium constant (Kp) Acids & bases Electrode potentials Electrochemical cells.
	Inorganic chemistry	AS content plus: Properties of Period 3 elements and their oxides Transition metals Reactions of ions in aqueous solution.
	Organic chemistry	AS content plus: Optical isomerism Aldehydes and ketones Carboxylic acids and derivatives Aromatic chemistry Amines Polymers Amino acids, proteins and DNA, Organic synthesis NMR spectroscopy Chromatography

A-Level Chemistry Exams

Content	Assessment	Questions
Paper 1 <ul style="list-style-type: none"> Inorganic chemistry, with relevant physical chemistry Relevant practical skills 	Written exam: 2 hours <ul style="list-style-type: none"> 105 marks 35% of A-level 	105 marks: a mixture of short and long answer questions
Paper 2 <ul style="list-style-type: none"> Organic chemistry, with relevant physical chemistry Relevant practical skills 	Written exam: 2 hours <ul style="list-style-type: none"> 105 marks 35% of A-level 	105 marks: a mixture of short and long answer questions
Paper 3 <ul style="list-style-type: none"> All practical skills All content 	Written exam: 2 hours <ul style="list-style-type: none"> 90 marks 30% of A-level 	<ul style="list-style-type: none"> 40 marks: questions on practical techniques and data analysis 20 marks: testing across the specification 30 marks: multiple choice questions

Why you should consider studying Chemistry in the 6th Form

The main advantages are:

- Chemistry is one of the eight *facilitating* subjects. Russell Group Universities, suggest you take at least one of these subjects at A level.
- The 100% pass rate in A level Chemistry.
- A high practical element to the course
- Chemistry is recognised as a highly academic subject - respected by universities and employers alike, as it requires such a broad range of skills.

Frequently asked questions

Do I need to have GCSE science qualifications?

You will need to have either gained B grades in Biology & Physics separate sciences at GCSE, with an A in chemistry or two A grades in “double science” (science A and additional science). Mathematics (higher) GCSE at a grade B or higher.

Are there any other AS/A-levels that would be useful to study with chemistry?

The mathematical content of the AS & A-Level increases from September 2015. You will need a good understanding of basic mathematical skills during this course and should be very confident with rearranging equations, being able to draw graphs with confidence and learning and using mathematical formulae. Studying AS mathematics alongside chemistry would support not only your mathematic skills & but also your ability to solve mathematical problems which are a characteristic of AS & A-level chemistry.

How do the AS and A level qualifications work in practice?

The whole A-level specification is changing from September 2015. The AS level is a standalone qualification, taken after 1 year and does not contribute to the overall A-level grade. The A-level is 2 years of study and will be examined at the end of those 2 years. The AS level & the 1st year of the A-level syllabus are however common and will be taught together.

Students studying the A-level will take an AS mock exam at the end of 1 year, which will give the student a good indication of their ability and be used as an indicator of grade to universities in the subject when applying for courses. It may also be used to determine whether the student can proceed to the 2nd year of the course.

What skills do I need to do well?

In our experience, there are 4 qualities which are particularly important to do well in both AS and A-level chemistry:

- The ability to learn factual material thoroughly
- A good understanding of concepts
- The ability to communicate clearly and precisely in writing
- The ability to dissect and solve mathematical problems accurately

How good is the teaching?

The **Ofsted** inspection noted teaching in chemistry is “**very good**” and the provision within the science department is “**very good**”.

Mr C Burnett, Chemistry & Mrs T Harris, Chemistry