

## Key Stage 5 Chemistry Curriculum Overview

Year 12	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>Skills</b>	Knowledge and understanding of scientific ideas, processes, techniques and procedures (AO1) are developed throughout the course, together with practical skills and chemical literacy. Students learn to apply knowledge and understanding of scientific ideas, processes, techniques and procedures: in both a theoretical and practical context when handling qualitative and quantitative data (AO2) and learn to analyse, interpret and evaluate scientific information, ideas, and evidence, in relation to: (i) issues to make judgements and reach conclusions and (ii) to develop and refine practical design and procedures.					
<b>Knowledge</b>	<b>Elements of Life and Developing Fuels</b>	<b>Elements of Life and Developing Fuels</b>	<b>Elements from the Sea and The Ozone Story</b>	<b>Elements from the Sea and The Ozone Story</b>	<b>What's in a Medicine</b>	<b>Polymers and Life</b>
<b>Alive and British Values</b>	Opportunities to develop Alive values: We can question, research, communicate, review. Students embrace values of being creative, resilient, organised and interdependent. Values and principles and Joint decision making is discussed in a global context.					
<b>Assessment</b>	Mini-tests EL/DF module test	Mini tests EL/DF module test	Mock exam EL/DF; ES/OZ module test	Mini tests; ES/OZ module test	Mini tests; Yr12 Mocks	Mini tests; WM module test
<b>Careers</b>	Research, spectroscopist	Engineering	Research, Antarctic survey	Environmental	R&D, Medical, pharmacist	Polymer chemists/ materials scientists

### How will studying this subject in Key Stage Five build on learning from Key Stages Three and Four?:

- develop essential knowledge and understanding of different areas of the subject and how they relate to each other
- develop and demonstrate a deep appreciation of the skills, knowledge and understanding of scientific methods
- develop competence and confidence in a variety of practical, mathematical and problem solving skills
- develop their interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with the subject
- understand how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society

## Key Stage 5 Chemistry Curriculum Overview

Year 13	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
<b>Skills</b>	Knowledge and understanding of scientific ideas, processes, techniques and procedures (AO1) are developed throughout the course, together with practical skills and chemical literacy. Students learn to apply knowledge and understanding of scientific ideas, processes, techniques and procedures: in both a theoretical and practical context when handling qualitative and quantitative data (AO2) and learn to analyse, interpret and evaluate scientific information, ideas, and evidence, in relation to: (i) issues to make judgements and reach conclusions and (ii) to develop and refine practical design and procedures. Practical skills developed throughout the course.					
<b>Knowledge</b>	PL, The Oceans, Chemical Industry	The Oceans, Chemical Industry	Colour by Design and Developing Metals	Colour by Design	Advanced notice article and exam prep	Exams
<b>Alive and British Values</b>	Legislation Agreed ways of working, policies and procedures	How the law protects you and others Codes of conduct	Values and principles	Democracy Joint decision making	Alive values – we are: resilient, can research, are questioning, are organisation – all are embraced throughout year 13.	
<b>Assessment</b>	WM module test, PL test	O and CI test	Mock exams	DM test	Exam practice and Final Exams: <ul style="list-style-type: none"> <li>• Fundamentals of chemistry</li> <li>• Scientific literacy in chemistry</li> <li>• Practical skills in chemistry</li> </ul>	
<b>Careers</b>	Biochemist, Forensic scientists, Agricultural chemist	Chemical engineering	Lab technician, Forensic scientists	Chemists		

### How will studying this subject in Key Stage Five help students to make their unique contribution to the world?:

It will help students:

- Develop their interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with the subject
- Understand how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society
- Provide them with transferable skills to related and other courses, apprenticeships or careers