

KS5 Long Term Curriculum Plan: BTEC Science Year 13

Curriculum Aim: In Applied Science we extend on the knowledge of GCSE and aim to prepare, inspire and nurture a passion for Science, whilst laying the groundwork for further study in courses such as forensic science, nursing and physiotherapy. We do this by covering a wide range of scientific knowledge and essential practical skills. This includes preparing students to be independent analytic thinkers and scientific investigators.

Link to prior learning: The subject builds on key knowledge and skills from GCSE Sciences, whilst diving deeper into key topics such as chromatography, internal energy of particles, cell theory, waves and the electronic structure of atoms.

Rationale of sequencing: Having sat exams at the end of year 13, we now continue with our Unit 4 and Unit 5 assignments. Students will cover practical scientific procedures and techniques as well as scientific investigation skills.

	Focus / Topic	Knowledge & Skills (from NC/Programmes of Study)	Assessment
Autumn 1	Unit 4 - Practical Scientific Procedures and Techniques Learning Aim A, B, C, and D.	Unit 4: Learning Aim A - Undertake techniques to prepare solutions and determine concentrations and purity Learning Aim B - Undertake biological procedures to investigate concentration and distribution of biological components Learning Aim C - Undertake physical procedures to examine energy transfer Learning Aim D - Review personal development of scientific skills for laboratory work.	Internally assessed through PSAB.
Autumn 2	Unit 4 Learning Aim A, B, C, and D.	Continue with Unit 4 and prepare for resits in January.	Mock exam in preparation for resits.
Spring 1	Unit 5 - Science Investigation Skills Learning Aim A, B, C, and D.	Unit 4: Learning Aim A - Undertake a literature search and review to produce an investigative project proposal Learning Aim B - Produce a plan for an investigative project based on a proposal Learning Aim C - Safely undertake the project, collecting, analysing and presenting the results Learning Aim D - Present the conclusions from the project using correct scientific principles.	Internally assessed through PSAB.
Spring 2			
Summer 1			

Further Information:

AAQ BTEC specification: <https://qualifications.pearson.com/content/dam/pdf/btec-aags/applied-science/2025/specification-and-sample-assessments/btec-national-in-applied-science-specification.pdf>