

KS5 Curriculum Overview 2023/24

Department: Applied Science

Description of KS5 Curriculum:

The Applied Science curriculum extends students' knowledge within the key strands covered at GCSE in biology, chemistry and physics. Key fundamental knowledge within these strands are revisited and students explore key scientific concepts in a greater depth. The curriculum focuses on developing students' ability to demonstrate scientific knowledge and demonstrate an understanding of scientific concepts. Students are also taught to analyse, interpret and evaluate scientific information. Students will be introduced to quantitative laboratory techniques which are relevant to science industries and expected to plan, carry out, analyse and evaluate these techniques.

Sequence of Teaching:

KS5	Term 1 Content	Term 2 Content	Term 3 Content
Year 12	Principles and Applications of science (Unit 1) External Exam Structure and functions of cells and tissues Periodicity and properties of elements - Structure and Bonding Practical Scientific Procedures and Techniques (Unit 2) coursework Assignment A - Titration and colorimetry Assignment B - Calorimetry	Principles and Applications of science (Unit 1) External Exam Periodicity and properties of elements - production and uses of substances Waves in communication Practical Scientific Procedures and Techniques (Unit 2) coursework Assignment C - Chromatography Assignment D - Personal development	Revision for external examination Physiology of the human body (Unit 8) Coursework Assignment A - The musculoskeletal system
Year 13	Science Investigation Skills (Unit 3) External Exam Fuels Plants Diffusion Electricity Enzymes	Physiology of the human body (Unit 8) Coursework Assignment B - The Lymphatic system Assignment C - The digestive system	Revision