

## Applied Science Curriculum Map

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 12  Extended Certificate and Diploma	<p>Transition from GCSE to A level</p> <p>Unit 1 – Learning Aim B</p> <ul style="list-style-type: none"> <li>Cell structure and function</li> <li>Cell specialisation</li> </ul> <p>Unit 1 – Learning Aim A</p> <ul style="list-style-type: none"> <li>Structure and bonding in applications in science</li> <li>Production and uses of substances in relation to properties</li> </ul>	<p>Unit 1 Learning Aim C</p> <ul style="list-style-type: none"> <li>Working with waves</li> <li>Waves in communication</li> </ul> <p>Consolidation and mock exam</p>	<p>Unit 1 – External exam</p> <p>Unit 2 – Learning Aim A</p> <p>Undertake titration and colorimetry to determine the concentration of solutions</p> <p>Unit 2A assignment</p>	<p>Unit 2 – Learning Aim B</p> <p>Understand calorimetry to study cooling curves</p> <p>Unit 2B assignment</p>	<p>Unit 2 – Learning Aim C</p> <p>Undertake chromatographic techniques to identify components in mixtures</p> <p>Unit 2C assignment</p>	<p>Unit 2 – Learning Aim D</p> <p>Review personal development of scientific skills for laboratory work</p> <p>Unit 2 D assignment</p> <p>Unit 3 – learning aim A, B and C (planning investigations, data collection, processing, analysis and interpretation, drawing conclusions and evaluation) are taught throughout this unit in the context of each learning aim</p> <p>Unit 3 – Learning Aim D – Enzymes in action</p>
Diploma Only	<p>Unit 9 – Learning Aim A</p> <p>Understand the interrelationship and nervous control of the cardiovascular and respiratory systems</p> <p>Unit 9 – Learning Aim B</p> <p>Understand the homeostatic mechanisms used by the human body</p> <p>Unit 9B assignment</p>	<p>Unit 9A assignment</p> <p>Unit 9 – Learning Aim C</p> <p>Understand the role of hormones in the regulation and control of the reproductive system</p> <p>Unit 9C assignment</p> <p>Unit 5 – Learning Aim A</p> <ul style="list-style-type: none"> <li>Relating properties to uses and production of substances -</li> </ul>	<p>Unit 5 – Learning Aim A</p> <ul style="list-style-type: none"> <li>Structures, uses and reactions of commercially important organic compounds</li> <li>Energy changes in industry</li> </ul> <p>Unit 5 – Learning Aim B</p> <ul style="list-style-type: none"> <li>The cardiovascular system</li> <li>Ventilation and gas exchange in the lungs</li> <li>Urinary system, structure and function</li> <li>Cell transport mechanisms</li> </ul>	<p>Unit 5 – learning Aim C</p> <ul style="list-style-type: none"> <li>Thermal physics in industrial and domestic appliances</li> <li>Materials in domestic and industrial applications</li> <li>Fluids in motion</li> </ul>	<p>Consolidation</p> <p>Unit 5 External exam</p>	<p>Unit 4 Learning Aim A – Understand the importance of health and safety in scientific organisations</p> <p>Unit 4A assignment</p>

<p>Year 13</p> <p>Extended Certificate and Diploma</p>	<p>Unit 3 – Learning Aim E – diffusion</p> <p>Unit 3 – Learning Aim F – plants and their environment</p>	<p>Mock Exams</p> <p>Unit 3 – Learning Aim G Energy content of fuels</p> <p>Unit 3 – Learning Aim H – Electrical Circuits</p>	<p>Unit 3 – External Exam</p> <p>Unit 8 Learning Aim A – Understand the impact of disorders of the musculoskeletal system and their associated corrective treatments</p>	<p>Unit 8A assignment</p> <p>Unit 8 Learning Aim B – Understand the impact of disorder on the physiology of the lymphatic system and the associated corrective treatment</p> <p>Unit 8B assignment</p>	<p>Unit 8 C Explore the physiology of the digestive system and the use of corrective treatment for nutritional deficiency</p> <p>Unit 8C assignment</p>	
<p>Diploma Only</p>	<p>Unit 4- Learning Aim B – making and testing an organic liquid</p> <p>Unit 4B assignment</p> <p>Unit 4- learning Aim D – Understand how scientific information can be stored and communicated in a scientific workplace laboratory</p>	<p>Unit 4 D assignment</p> <p>Unit 4 – Learning Aim C – making and testing an organic solid</p> <p>Unit 4C assignment</p> <p>Unit 6 – Learning Aim A - Individual investigation project proposal and literature review</p>	<p>Unit 6A assignment</p> <p>Unit 6 – Learning Aim B – Individual investigation plan</p> <p>Unit 6B assignment</p>	<p>Unit 6 – learning aim C and D – Undertake the individual investigation, collect analyse and present results, review and evaluate the project using correct scientific principles</p>	<p>Completion of any outstanding assignment work</p>	