

Physics

Awarding Body

Assessment and Qualification Alliance (AQA)

Course Level

AS and A2 level

Course Leader

Mr M. Quimby

Entry Requirements

Grade B in GCSE Science and be of a similar standard in Maths. Individual cases will be considered on their own merits, however, so if in doubt, ask!

Course Description

AS Level: 3 units	A2 Level: 3 units
<p>Unit 1: Particles, Quantum Phenomena and Electricity 40% of AS/ 20% of A2</p> <p>Particle physics introduces students to the fundamental properties and nature of matter, radiation and quantum phenomena. In contrast, the study of electricity in this module builds on and develops previous GCSE studies and provides opportunities for practical work and looks into important applications</p> <p>External assessment: 1¼ hr exam</p>	<p>Unit 4: Fields and Further Mechanics 20% of A2</p> <p>The first section studies momentum and introduces circular and oscillatory motion and covers gravitational fields. A study of electric fields leads into capacitors and how quickly they charge and discharge through a resistor. Magnetic fields lead into the generation and transmission of alternating current.</p> <p>External assessment: 1¾ hr exam.</p>
<p>Unit 2: Mechanics, Materials and Waves 40% of AS/ 20% of A2</p> <p>The module introduces vectors and then develops knowledge and understanding of forces and energy from GCSE Additional Science. In the second section, materials are studied in terms of their bulk properties and tensile strength. The final section extends GCSE studies on waves by developing in-depth knowledge of the characteristics, properties and applications of waves, including refraction, diffraction, superposition and interference.</p> <p>External assessment: 1¼ hr exam</p>	<p>Unit 5: Optional Course 20% of A2</p> <p>Choose one from:</p> <ul style="list-style-type: none"> Astrophysics Medical Physics Applied Physics Turning Points in Physics <p>External assessment: 1¾ hr exam.</p>
<p>Unit 3 : Investigative and Practical skills 20% of AS/ 10% of A2</p> <p>Internal assessment through investigative assignments based on practical work carried out in lesson time.</p>	<p>Unit 6 : Investigative and Practical skills 10% of A2</p> <p>Internal assessment through investigative assignments based on practical work carried out in lesson time</p>

