Science

A-Level Physics

Subject Physics

Exam Board OCR

Specification Numbers H432

Teacher Responsible Mr Opoku/Mr Sahota

Introduction Physics tries to explain how the Universe works. During the A-Level, students will extend the fundamental aspects of forces, motion, energy and electricity they learned at GCSE, and apply them to everyday situations as well as more cutting edge topics, such as cosmology, quantum physics and particles.

Aims of the Course Students will develop a deeper understanding of Physics from their GCSEs. They will develop their numeracy skills as well as their understanding of the very small, in terms of subatomic particles, and the very large, such as the forces that hold the universe together.

They will cover the following content over the two years:
Module 1: Development of Practical Skills in Physics
Module 2: Foundations of Physics
Module 3: Forces and Motion
Module 4: Electrons, Waves and Photons
Module 5: Newtonian World and Astrophysics
Module 6: Particles and Medical Physics

How You Are Assessed Students will sit three examinations at the end of Year 13 and a fourth component where students complete a series of practical activities demonstrating certain fundamental skills.

Component 01 – Modelling Physics: assesses content from modules 1, 2, 3 & 5. It lasts 135 minutes and forms 37 % of total A-Level.

Component 02 – Exploring Physics: assesses content from modules 1, 2, 4 & 6. It lasts 135 minutes and forms 37% of total A-Level.

Component 03 – Unified Physics: assesses content from all modules. It lasts 90 minutes and forms 26% of total A-Level.

Component 04 – Practical Endorsement in Physics (non-exam assessment reported separately)

Links to Future Careers Physics is very useful in combination with any other science subject and is vital for anyone thinking of pursuing a career in engineering or medicine. It is a qualification highly regarded by employers and Further and Higher Education.

Entry Requirement
Minimum of a Grade 6 in GCSE Physics or Grade 6-6 in GCSE Combined Science
Grade 5 in GCSE Mathematics and Grade 4 in English (preferable)