Christopher Whitehead Language College & Sixth Form

A-level Physics

Board and Specification: **OCR A-level Physics A H556**
Head of Department: **Mrs. Dorothy Serafini (D.serafini@cwlc.email)**

Subject specific entry requirements:

- Three grade 6s in Triple Science (preferably with a grade 7 in Physics)
- Grade 7 in Combined Science where Triple Science is not taken
- Grade 5 in English Literature and/or English Language
- Grade 7 or above in GCSE Mathematics

What skills are required of students?
Strong mathematical skills, practical skills; including planning, implementing, analysis and evaluation.
Support will be given with more than one teacher available to explain these new concepts in a different way that may aid understanding.
Small groups should allow teachers to offer regular individual help during lessons.

Course outline:
As an A-level Physics student you will further develop the practical skills gained at GCSE. You will undertake the following topics: foundations in physics, forces and motion, electrons, waves and photons; Newtonian world and astrophysics, particles and medical physics.

A-level physics will teach you the basic principles of the science, giving you a wide range of knowledge into the guiding forces of the universe; including velocity, acceleration, force, mass and energy. There forces can be applied to the motion of all objects, i.e. electrons, athletes, animals or even plants.

Modules titles and codes: A-level in Physics (H556)

Module 1 – Development of skills in practical 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

What kinds of work will you do in class and at home?

- You will gain a wide range of skills through practical work and experiments integrated with theoretical study and research.
- Assessment will be through written papers.
- Support will be given with more than one teacher being available to explain these new concepts in a different way that may aid understanding.
- Small groups should enable regular individual help during lessons.

What other A-levels does your subject connect well with?
Mathematics, Chemistry and Biology.

What types of university course will be helped by this A-level?

Having an A-level Physics is very impressive in a variety of ways, offering you access to a huge range of options for both further education and careers. A-level Physics is highly respected as a qualification and it can open doors to a number of possibilities.

Possible career options with an A-level Physics qualification include: architecture, astrophysics, food scientist, climatologist, radiographer, ergonomics expert, medical physicist, theoretical physicist, geophysicist, chemist, oceanography, naval architect, nuclear physicist, audio technician and orthoptist, to name but a few.

There are a huge range of careers where A-level Physics is highly desirable, not to mention the engineering possibilities, such as flight, design, mining, medical, electrical/electronic, mechanical, aeronautical and agricultural.