



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:

- Triple Science must have a grade 7 in Physics, with grade 6s in the other two sciences
- Grade 8-7 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. These 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.