PHYSICS - A LEVEL (A Linear Course)

Course introduction

Physics is the subject that provides you with the Theory of Everything and answers the most important question of all – WHY?

Physics will take you on a journey from fundamental building blocks of matter to the forces that hold galaxies and the whole universe together. It will give you a grounding in general physics concepts, dealing with forces and motion, plus the more abstract concepts involved with electricity, waves and WIMP's. It may delve deeper into the realms of Astrophysics or take you back in time to the important experiments that have enhanced our lives today.

Physics is the science that leads us to new technologies that will shape our future. Learning about important theories is backed up by a significant amount of practical work to develop your analytical skills and also provide further enjoyment.

Entrance requirements

Students who wish to study Physics must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including English Language and Maths at 6 or above and at least a Grade 6 in Core and Additional Science (or Physics) GCSE.
It is strongly recommended that you should only study A Level Physics if you are also studying A Level Maths

How the course is taught

Physics is taught using a mixture of practicals, group work, problem solving and whole class teaching, tailored to specific needs. You will be expected to read around the subject and complete regular homework. One to one sessions are offered to students requiring extra help.

Areas covered by the course

YR 1

Measurements and their errors
Particles and radiation
Waves
Mechanics and materials
Electricity

YR 2

Further mechanics and thermal physics
Fields and their consequences
Nuclear Physics

Plus one option topic from:

Astrophysics, Medical physics, Engineering physics, Turning points in physics and Electronics.

How the course is assessed

A Level Assessment

Paper 1
34% of A2

Paper 2
34% of A2

Paper 3
Section A - 18% of A2
Paper 3
Section B (option topic) - 14% of A2

The A level is designed as a two year course – students would be expected to sit all of the exams at the end of Year 13.

Career opportunities

Physics is ideal if you are considering a career in the Physical Sciences, Engineering, Architecture, Medicine or even Archaeology. Physics is a traditional subject that is valued by academic institutions and employers due to the challenges it demands of its students.