Physics (Linear)

OCR: Course Code H556
Contact: Mrs K Rossiter

Course Outline:

This linear course is designed to deliver a balance of classical and contemporary Physics and will include the development of practical skills. The course is designed to encourage students to develop an interest in, and enthusiasm for physics, develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of How Science Works and develop essential knowledge and understanding of different areas of Physics and how they relate to each other.

The course begins with a study of Mechanics considering the laws and relationships of: force, motion, work and energy. Practical work is undertaken throughout the course and learning through experiment, as well as theory, develops skills, knowledge and conceptual understanding.

The second module, Electrons, Waves and Photons studies the areas of electric current, resistance, DC circuits, waves and Quantum Physics.

The practical approach to learning continues into the second year when topics include: studies of The Newtonian World and Fields, Particles and Frontiers of Physics.

The first module, The Newtonian World begins with study of Newton's laws, momentum, circular motion and oscillations and thermal physics.

The second module involves the study of electric and magnetic fields, capacitors and exponential decay, nuclear physics, medical imaging and modelling the universe

Throughout both years 12 and 13 pupils will complete a total of 12 compulsory practical's which will allow them to apply their knowledge from a range of module areas.

Assessment Framework:

This A level is assessed at the end of Year 13. There will be 3 examination papers assessing the work covered in both Years 12 and 13.

The assessment of practical skills is achieved through completion of a range of experiments. This leads to a Practical Endorsement which will appear on the student's certificate as a separately reported result, alongside the overall grade for the qualification. The Practical Endorsement does not count towards the final grade.

Course Entry Requirements:

Physics 6 and Maths 6 or Double Science 6,6 and Maths 6. A 5 may be considered but the final decision will be with the sixth form team.

Why Study A-Level Physics?

Physics prepares students to progress onto university courses in Physics, engineering, other sciences or related subjects, or to enter employment where knowledge of physics would be useful. A background in Physics is viewed as advantageous for business or finance courses or employment in this field.

Be The Best You Can Be