

Physics

Examination Board: OCR A

Staff Lead

C Wilson, BEng (Hons), PGCE

Why Study Physics?

Physics is a difficult subject that opens many doors to your future. The A level course encompasses all aspects of the subject with many ideas and topics you will recognise from GCSE studied again in Year 12 giving you a chance to expand your knowledge of them and reach a much deeper level of understanding on some subjects you have previously only skimmed the surface of. In Year 13 you will meet new concepts and ideas such as the thermal properties of gases, how gravitational forces interact, meet quantum Physics for the first time and explore ideas relating to the beginning of the known Universe.

Career Paths & Degree Courses

The study of Physics at A level prepares students to progress onto further education. Physics is the basic subject for most engineering courses such as Civil, Mechanical, Electronic and Communications, all of which offer excellent career prospects and it links well with Mathematics and Computing.

Students will often take Physics as a first step on the journey towards a career in a pure Science career such as studying Astrophysics or nuclear Physics or alternatively it may lead to engineering, making use of the wide variety of problem solving experience you will gain throughout the course. However, the skills you gain can also lead to many other paths. Students pursuing a career in Finance or Medicine can benefit greatly from the applied mathematical skills and knowledge involved in Physics. The practical skills studied throughout the two-year course can also be a useful experience for those looking to work in a more hands on career. As a top A Level, Physics is also well regarded for entry into a wide range of other careers due to the nature of the course and the advanced skill set any student passing the course would possess.

Requirements

At least five 9-4 grades at GCSE, with a minimum average grade score of 4.5. At least 2 grade 6's in Science including 6 or above in Physics component. Mathematics GCSE at grade 6 or above.

Physics H556		Assessment Overview	
Content is split into 6 teaching modules:			
Module 1	Development of Practical Skills in Physics	Modelling Physics (01) 100 marks 2 hours and 15 min written paper	37% of total A Level
Module 2	Foundations of Physics		
Module 3	Forces and Motion	Exploring Physics (02) 100 marks 2 hour and 150 min written paper	37% of total A Level
Module 4	Electrons, Waves and Protons		
Module 5	Newtonian World and Astrophysics	Unified Physics (03) 70 marks 1 hour and 30 min written paper	26% of total A Level
Module 6	Particles and Medical Physics		
Component 01 assesses content from modules 1, 2, 3 and 5 Component 02 assesses content from modules 1, 2, 4 and 6 Component 03 assesses content from all modules (1 to 6)		Practical Endorsement in Physics (04)* Non Exam Assessment	Reported separately