

PHYSICS

OCR AS level specification H158

"Imagination is more important than knowledge." Albert Einstein

Unit	Unit Title	Duration	Mode of Assessment	Weighting at A2
1	Mechanics Unit test G481	1 hour	Written examination	30%
2	Electrons, Waves and Photons Unit test G482	1 ¾ hours	Written examination	50%
3	Practical Skills in Physics 1 G483	Coursework	Three practical tasks set by OCR	20%

The study and understanding of Physics is of increasing importance in today's technological society. The laws and concepts of Physics help us understand the world around us and applications of Physics are made use of widely in everyday life, in medicine and in industry and commerce.

Candidates for AS Physics should have achieved A*A*, AA or BB in GCSE Physics or Science Dual Certification or other suitable qualifications and be confident in applying Mathematics to solve problems.

Together with A2 Physics, the course is excellent preparation for anyone wishing to study Physics or a related degree at university. It is also essential for other science/technology degrees such as Engineering and useful for the medical sciences. In addition, it provides a very good general preparation for employment, since success at A level Physics shows that you are a good logical and coherent thinker, with good practical and creative skills.

Physics can be taken in combination with any other subject but especially Mathematics, the other Sciences, Languages and Psychology

Style of work: Lessons will be a mix of theory and demonstrations/practical experiments. Each week, 2/3 problem solving exercises/practical write-ups will be set for homework. In addition, further independent study will be need to learn definitions theories, equations etc.



PHYSICS

OCR A2 level specification H558

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Unit	Unit Title	Duration	Mode of Assessment	Weighting at A2
4	The Newtonian World Unit test G484	1 hour	Written examination	30%
5	Fields, Particles and Frontiers in Physics Unit test G486	1 ¾ hours	Written examination	50%
6	Practical Skills in Physics 2 G483	Coursework	Three practical tasks set by OCR	20%

The A level course builds upon the AS units of Mechanics and Electrons, Waves and Photons and it continues to explore the principles of Physics and their applications. The units include the study of Newton's laws and forces and fields as well as some discussion of concepts relating to the Universe, its origin and its final fate.

Units 4 and 5 explore the idea that the laws of Physics can be applied to solving the mysteries of the Universe and its evolution. Important applications such as the use of Physics for medical imaging, diagnosis and treatment are also introduced. The Unit 6 coursework tasks involve applying skills, knowledge and understanding from different parts of the A2 course to practical situations.

A level candidates will have studied the AS specification H158 and will have sat the three unit examinations.

Style of work: Lessons will be a mix of theory and demonstrations/practical experiments. Each week 2/3 problem solving exercises/practical write-ups will be set for homework. In addition, further independent study will be need to learn definitions theories, equations etc.

