



## Physics

Pearson Edexcel IGCSE (Course Code: 4PH1)

### Description

The aims and objectives of this qualification are to enable students to:

- learn about unifying patterns and themes in physics and use them in new and changing situations
- acquire knowledge and understanding of physical facts, terminology, concepts, principles and practical techniques
- apply the principles and concepts of physics, including those related to the applications of physics, to different contexts
- evaluate physical information, making judgements on the basis of this information
- appreciate the practical nature of physics, developing experimental and investigative skills based on correct and safe laboratory techniques
- analyse, interpret and evaluate data and experimental methods, drawing conclusions that are consistent with evidence from experimental activities and suggesting possible improvements and further investigations
- recognise the importance of accurate experimental work and reporting scientific methods in physics
- select, organise and present relevant information clearly and logically using appropriate vocabulary, definitions and conventions
- develop a logical approach to problem solving in a wider context
- select and apply appropriate areas of mathematics relevant to physics as set out under each topic
- prepare for more advanced courses in physics and for other courses that require knowledge of physics.

### Assessment Breakdown

Component 1	Paper 1P	Assessed through a 2-hour written examination, set and marked by Pearson. A combination of different question styles, including multiple-choice questions, short-answer questions, calculations and extended open-response questions. Assesses the content that is not in bold and does not have a 'P' reference. Questions may come from any topic area across the specification.	61%
Component 2	Paper 2P	Assessed through a 1-hour and 15-minute written examination, set and marked by Pearson. A combination of different question styles, including multiple-choice questions, short-answer questions, calculations and extended open-response questions. Assesses all the content, including content that is in bold and has a 'P' reference. Questions may come from any topic area across the specification. Statements in bold cover some sub-topics in greater depth.	39%

### Course Outline

Year	Michaelmas Term	Lent Term	Trinity Term
9	Motion in the universe	Energy	Further motion
	Density and pressure	Waves	
	Basic electricity	Electromagnetic spectrum	
10	Forces, movement and shape	Electric charge	Energy resources
	Hooke's law and moments	Fission and fusion	Specific heat capacity



	Pressure Radioactivity	Advanced electricity	
11	Work and power Momentum Electromagnetism Light and sound	Ideal gases Stellar evolution Cosmology	Revision