A-Level Physics

Entry requirements	Grade 6+ in Physics GCSE or Grade 6, 6 in GCSE Combined Science, plus Grade 5+ in English and Grade 6+ in Maths Ideally should also be studying A-Level Mathematics

Lead Teacher
Ms J Hayer
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Exam Board
AQA

Specification
7407/7408

COURSE DETAILS

Course Overview

Physics will explore the fundamental principles that form the basis of physics. Candidates will carry out experimental work to illustrate the theoretical principles included in this unit:

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

This unit introduces more of the principles that underpin physics and looks at the applications of these principles and those that have been developed in the previous unit. Knowledge is from unit one is built upon students will be also be examined on the following additional topics:

- Further mechanics and thermal physics
- Fields and their consequences

HOW WILL I BE ASSESSED?

Assessment	% of GCE	Assessment Details	Content
Paper 1 Periodic Motion	34%	2 hours 85 marks	Long and short questions.
Paper 2 Thermal Physics	34%	2 hours 85 marks	Long and short questions.
Paper 3 Practical exam	32%	2 hours 80 marks	Practical questions on procedures and data analysis and option topic.

ASSESSMENT OBJECTIVES

AO1: Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures.

AO2: Apply knowledge and understanding of scientific ideas, processes, techniques and procedures in a theoretical context in a practical context when handling qualitative data when handling quantitative data.

AO3: Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to: make judgements and reach conclusions develop and refine practical design and procedures

WIDER READING

- A Short History of Nearly Everything by Bill Bryson
- Why don't penguins' feet freeze? By New Scientist
- The Grand Design by Stephen Hawkin and Leonard Mlodinow
- Newton by Peter Ackroyd
- The Quantum Universe: Everything that can happen does happen by Brian Cox and Jeff Forshaw

FURTHER ASPIRATIONS

What degree courses could this lead to?	What careers could this course lead to?
• Physics • Engineering • Biophysics • Medicine • Accountancy • Law • Dentistry	• Geophysicist/field seismologist • Higher education lecturer • Metallurgist • Nanotechnologist • Radiation protection practitioner • Research scientist (physical sciences) • Teacher • Engineer • Space Industry