



SUBJECT: Physics A Level

HEAD OF DEPARTMENT:
Dr F Wall

EXAM BOARD AND SYLLABUS NUMBER:
OCR Syllabus A Physics H556 / QAN: 6014743X

SYNOPSIS OF CONTENT: Module 1 Development of Practical Skills in Physics. This involves planning, implementing, analysing and evaluating investigations. Module 2 Foundations of Physics. Includes physical quantities and units, making measurements and analysing data. Module 3 Forces and Motion. Includes motion, forces in action, work, energy and power, materials, momentum. Module 4 Electrons, Waves and Photons. Charge and current, energy, power, resistance, electrical circuits, waves, quantum physics. Module 5 Newtonian World and Astrophysics. Covers thermal physics, circular motion, oscillations, gravitational fields, astrophysics and cosmology. Module 6 Particles and Medical Physics. Covers capacitors, electric fields, electromagnetism, nuclear and particle physics, medical imaging.	WHY STUDY THIS SUBJECT? Physics helps us understand the universe around us, from the tiniest subatomic particle to the largest galaxy and beyond. It also helps us understand how technology around us works. Physics develops mathematical problem solving skills and logical thinking. It helps us frame questions in a way that can be answered, and discover answers for ourselves. SELF STUDY ADVICE / USEFUL WEBSITES: https://isaacphysics.org/
HOW IS IT ASSESSED? Paper 1- Modelling Physics -multiple choice questions, structured questions and extended response covering theory and practical skill. (2hrs 15mins) Paper 2 -Exploring Physics -multiple choice questions, structured questions and extended response covering theory and practical skills. Questions on material from modules 1, 2, 4 and 6. (2hrs 15 mins) Paper 3 -Unified Physics - Structured questions and extended response questions on material from all modules.(1hr 30 mins)	ADDITIONAL INFORMATION / CAREER OPPORTUNITIES Physics provides an exciting opportunity for capable mathematicians to solve problems with a real world context. It is highly valued qualification for university entry and for careers that involve a mathematical skill set. Physics is a required subject (with maths) for engineering. It is a recommended subject for Computer science and Maths. Many people working in economics and finance have a background in physics because of the maths used.

<p>Practical skills- non-exam practical endorsement reported separately pass/fail. 12 key practical assessments carried out across the course and examined on the written papers.</p> <p>You should expect 40% of the assessment in physics to require maths above GCSE level.</p>	<p>SPECIFIC MATRICULATION REQUIREMENTS</p> <p>Grade 6 in GCSE Physics or grade 66 in GCSE Combined Science: Trilogy, with Grade 6 in GCSE Mathematics</p>
--	--