

A Level SCIENCE: PHYSICS

Specification: OCR Physics H566

What will I study?

Development of practical skills in Physics:

Foundation of Physics

- Quantities and units
- Scalars and vectors
- Measurements

Forces and Motion

- Motion
- Forces
- Work
- Energy and power
- Materials
- Newton's laws

Electrons, Waves and Photons

- Charge and current
- Energy
- Power and resistance
- Electrical circuits
- Waves
- Quantum physics)

Newtonian world and astrophysics

- Thermal physics
- Circular motion
- Oscillations
- Gravitational fields
- Astrophysics

Particles and Medical Physics

- Capacitors
- Electric fields
- Electromagnetism
- Nuclear and particle physics
- Medical imaging

How will I be assessed?

Paper 1

- Mechanics
- Forces & Newton's laws
- Energy
- Materials
- Thermal physics & ideal gases
- Circular motion
- Simple Harmonic motion

- Gravitational fields
- Cosmology & Astrophysics

Paper 2

- Electricity
- Waves
- Quantum phenomena
- Capacities
- Electrical fields
- Magnetic fields
- Particle physics
- Radioactivity
- Nuclear physics
- Medical imaging

Paper 3:

- Synoptic

How will I learn?

- Working through examples
- Problem solving
- Practical activities
- Research & discussion

What skills will I need?

- Self-motivation
- Logical thinking
- An enjoyment of problem-solving
- Determination
- Good algebra skills

Careers & Progression

Physics is a very well respected A Level course which will help develop the skills, understanding and knowledge that many employers across a range of industries are looking for. You develop scientific knowledge, problem solving skills, analytical thinking, and meticulous practical skills.

This course could be taken to complement other A Level courses such as Chemistry, Biology, or Mathematics. These all could lead to progression onto higher education in a science-related subject or more general higher education courses.