

A Level

Specification: OCR Physics H566

SCIENCE: PHYSICS

Contact:

JMS: Dr R Marsh

FZ: Mr A Easton

What will I study?

Development of practical skills in Physics Foundation of Physics (quantities & units, scalars & vectors, measurements), Forces & motion (motion, forces, work, energy & power, materials, Newton's laws) Electrons, waves & photons (Charge & current, energy, power & resistance, electrical circuits, waves, quantum physics) Newtonian world and astrophysics (Thermal physics, circular motion, oscillations, gravitational fields, astrophysics) Particles & medical physics (Capacitors, electric fields, electromagnetism, nuclear & particle physics, medical imaging)

How will I be assessed?

Paper 1

- Mechanics
- Forces & Newtons 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 advanced level courses such as Chemistry, Biology or Maths. These all could lead to progression onto higher education in a science related subject or more general higher education courses.