

A LEVEL PHYSICS

Exam Board: Edexcel

Syllabus Code: 9PH0

Entry Requirement

Students who wish to study A Level Physics are required to achieve at least a grade 7 in GCSE Maths. It is also necessary for students to have at least a grade 7 in IGCSE Physics or grades 87 in IGCSE Science (Double Award).

Introduction

The course is designed to be a rigorous and demanding look at the fundamental areas of Physical science and as such a high level of mathematical proficiency is necessary. The course also requires students to develop good problem solving skills, to learn how to communicate science effectively and to grasp how to carry out safe, accurate, reproducible experiments to validate theory.

Students who do well in A Level Physics tend to have a genuine curiosity about how the world works and to enjoy stretching their understanding.

Science Practical Endorsement

A Level Physics students will also be assessed on a stand-alone practical qualification called the Science Practical Endorsement (SPE).

All these topics are assessed at the end of the two year A Level course

The SPE requires students to meet a list of core practical competencies, which should be demonstrated through the satisfactory completion of 16 core practicals spread over the two year A Level Physics course.

Syllabus Content

A Level Physics is a linear course which consists of the following topics:

Lower Sixth Course

- Topic 1 – Working as a Physicist (this is taught through all the topics)
- Topic 2 – Mechanics
- Topic 3 – Electric Circuits
- Topic 4 – Materials
- Topic 5 – Waves and Particle Nature of Light

Upper Sixth Course

- Topic 6 – Further Mechanics
- Topic 7 – Electric and Magnetic Fields
- Topic 8 – Nuclear and Particle Physics
- Topic 9 – Thermodynamics
- Topic 10 – Space
- Topic 11 – Nuclear Radiation
- Topic 12 – Gravitational fields
- Topic 13 - Oscillations

Entry Requirements

Although not compulsory, it is strongly recommended that students choosing Physics also take A Level Mathematics as students need to have good algebraic and graphical skills in order to get the most from the course.