

PHYSICS Advanced Level

Qualification Level 3 Advanced GCE in Physics

Exam Board AQA

Course Specific Entry Requirements Grades 6 or above in GCSE Combined Science **or** Grade 6 or above in GCSE Physics **and** Grade 5 or above in in GCSE Chemistry or GCSE Biology. You must also achieve Grade 6 or above in GCSE Mathematics

Overview

Advanced Level Physics is a challenging, rewarding course that will help you to develop skills and knowledge necessary for a successful career. Advanced Level Physics is, and always has been, a universally valued academic subject, accepted by all Further and Higher Education establishments, as well as being a fascinating study in its own right. Unlike the other sciences, physics has no limits – everything in your life, on this planet, on other planets, to the far reaches of the Universe and beyond is in physics' job description!

What will I learn?

In the **first year** of the course, you will study:

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

In the **second year**, you will learn about:

- ▲ Further mechanics and thermal physics
- ▲ Fields and their consequences
- ▲ Nuclear physics
- ▲ One optional topic chosen from: astrophysics ▲ medical physics ▲ engineering physics ▲ turning points in physics ▲ electronics

The eight topics are assessed via three written examinations taken at the end of the course. Papers 1 and 2 are worth 35% of the total grade and Paper 3 is worth 30%. The three written examinations will each last two hours, and consist of multiple choice, short and long answer questions. Practical and data analysis skills are assessed in the final written exam along with the optional topic.

Practical Skills Endorsement

This qualification will give you the opportunity to use relevant apparatus and techniques in order to develop and demonstrate specific practical skills. To achieve a pass, students must demonstrate that they are competent in all of the practical skills listed for that subject. This will be achieved by completing a series of core practicals throughout the course. This is a separate qualification and does not form part of the A Level grade.

How will I learn?

Your lessons will take many forms and will involve a range of interactive teaching and learning strategies. There may be lectures, seminars, discussion groups or practical work. You will be expected to read journals, engage in debate and to take an active part in your own learning.

Where could it lead?

Physics is a facilitating subject, the study of which could take you anywhere in the Universe. It is the widest of the sciences, ranging from the internal make up of protons and neutrons to the far reaches of deep space. Good reasons for opting for Physics are that you find the subject interesting, you want to pursue physics at a higher level, or you would like a career in Sciences, including any medical or engineering discipline.