

GCE AS Physics

Exam board: AQA

Duration: 1 Year

COURSE DETAILS/UNITS AND AIMS

The AS Physics course is a 1 year course worth a maximum 20 UCAS points.

The course contains 5 topics each of which contain practical skills assessments that must be passed to gain the qualification.

Assessment

The course will be assessed at the end of the year with two 90 minutes exam papers. Paper 1 is made up of 70 marks of short and long answer questions on the 5 topics below. Paper 2 will be made up of 20 marks testing your practical skills and data analysis, 20 marks testing any of the content from the AS and 30 further marks of multiple choice questions. In addition at least 40% of the questions will test your practical skills and therefore your ability to understand and carry out practical's is also vital for success as is a good understanding of Higher tier GCSE maths.

Content

Measurements and their errors

In this section of the qualification you will look at SI units, the limitations of physical measurements and estimations. This unit will draw upon your previous higher tier mathematics and therefore it is important that you have an understanding of maths to be able to understand this unit.

Particles and Radiation

This is the unit where you learn to impress your friends with all manner of new terms. The unit will build on what you currently know about the atom and then delves deeper. You will learn about particles and antiparticles, quarks, baryons, antineutrons, mesons pions and Kaons, just to name a few. You will then start to look at the photoelectric effect, photon emission and wave-particle duality.

Waves

This unit looks at progressive, longitudinal, transverse and stationary waves. In addition to exploring refraction and diffraction

Mechanics and materials

This topic focuses heavily on forces and building on your knowledge from GCSE, the materials section looks at things such as elastic limits, strain and tensile strength. This is an ideal unit for budding engineers.

SKILLS AND QUALIFICATIONS REQUIRED

The skills you will need to develop and extend will include practical lab skills, report writing and research techniques. There will be an expectation that after each practical you would write up the investigation in full during your private study time. Therefore you must also be comfortable with fully writing up investigations, analysing and presenting the data and able to draw conclusions based on your evidence.

Due to the technical nature of this subject entry requirements are **BB in your GCSE Sciences**, one of which must be Physics if you took the triple award and a **B for GCSE Mathematics**.

CAREER INFORMATION

A physics background can lead on to a huge range of jobs ranging from a pyrotechnician, particle physicist, computer games designer, structural engineer and renewable energy scientist. The sky really is the limit.



FURTHER INFORMATION PLEASE CONTACT - Mr D Huckin

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