

PHYSICS

AT ADVANCED LEVEL (A/S AND A2)

AQA, Specification: A

Summary of Subject Content

This course has been designed to encourage students to develop essential knowledge and understanding of concepts of Physics, an understanding of scientific methods, an awareness of advances in technology, recognition of the value of Physics in society and to appreciate the relationship between different aspects of the subject. The new specification aims to illustrate how science makes decisions about scientific issues and how science contributes to the success of the economy. The content of the specification is underpinned by the recognition of How Science Works, to show how physics affects modern life.

First Year :

AS: Module 1: Particles, Quantum Phenomena and Electricity.

Module 2: Mechanics, Material and Waves.

Module 3: Investigative and Practical Skills in AS Physics.

Second Year :

A2: Module 4: Fields and Further Mechanics.

Module 5: Section A : Nuclear and Thermal Physics.

Module 5 Section B : Options including Astrophysics, Medical Physics, Applied Physics or Turning Points in Physics.

Module 6 Investigative and Practical Skills in A2 Physics

Assessment

The AS course will be assessed by 2 examinations counting for 80% of the marks and an assessment of the students practical and investigative skills. The A2 course is assessed in a similar way.

Aptitudes, skills or qualities you will need:-

Candidates wishing to study Physics at this level will need to be competent in basic Investigational and Mathematical skills and have a sound understanding of Physics at GCSE level. They should be prepared to study systematically and apply knowledge learnt as the course progresses, and should also be prepared to develop understanding of knowledge gained with background reading.

Values of the Subject for Higher Education and Future Careers:-

This specification is ideally suited for those candidates wishing to pursue a Higher degree in Science, Medicine and Engineering, who are wishing to pursue a career in Technological, Medical and Engineering industries, or wishing to complement AS-level subjects with a course that expands their science knowledge.