Physics

Course Introduction

Advanced Level Physics involves a more detailed study of Wave Theory, Mechanics, Thermodynamics, Atomic Physics, Electricity and Electromagnetism. There is also the opportunity to study other topics such as Medical Physics and Particle Physics. Successful students will be those who are prepared to developed a problem solving approach to the subject.

Assessment

AS Level

Paper 1
Written exam: 1 hour 30 minutes - 70 marks
50% of AS Level.
Questions: 70 marks of short and long answer questions split by topic.

Paper 2
written exam: 1 hour 30 minutes.
70 marks
50% of AS Level.
Section A: 20 marks of short and long answer questions on practical skills and data analysis.
Section B: 20 marks of short and long answer questions from across all areas of AS level content.
Section C: 30 multiple choice questions.

A Level
Paper 1- Questions on topics 1 to 6
written exam: 2 hours
85 marks
34% of AS Level
Questions -60 marks of short and long answer questions and 25 multiple choice questions on content.

Paper 2 - Questions on topics 6 to 8
written exam: 2 hours
85 marks
34% of AS Level.
Questions - 60 marks of short and long answer questions and 25 multiple choice questions on content.

Paper 3
Section A Compulsory section: Practical skills and data analysis.
Section B: Questions on the chosen topic
written exam: 2 hours
80 marks
32% of A-level.

Questions - 45 marks of short and long answer questions on practical experiments and data analysis.
35 marks of short and long answer questions on optional topic.

Minimum Entry Requirement

BB grades in GCSE Science and
B grade in GCSE
Physics (Triple award)

Physics

AS Level Specification

AS Physics

Subject content

Core content

1 Measurements and their errors
2 Particles and radiation
3 Waves
4 Mechanics and materials
5 Electricity
4 Mechanics and materials
5 Electricity
6 Further mechanics and thermal physics
7 Fields and their consequences
8 Nuclear physics

Options:

One option to be studied Astrophysics, Medical physics, Engineering physics, Turning points in physics, or Electronics.

A Level Specification

Subject content

Core content

1 Measurements and their errors
2 Particles and radiation
3 Waves

Students following either the AS or A-Level course should be prepared to develop problem-solving techniques. They must have an ability to think for themselves and develop an open minded approach that some of the more difficult concepts such as the Wave Particle Duality of matter require.