

POST 16 SUBJECT OVERVIEW

Name of Subject - A level Physics

Which Examination Specification is Studied for this Course?

AQA Physics 7408

Why should I study this course?

From the very small to the very large, Physics underpins life as we know it and every way that can and will change in the future. Physics underpins developments and huge discoveries and the skills you would develop as part of A level Physics will allow you to be part of this.

Who is suitable to study this course?

A level Physics is for anyone that is intrigued by science and the developments into the future. Students need also to be confident and competent in Maths and application.

Physics leads to a wide range of future careers including research research, medical radiography and engineering. The skills that you develop during the course opens up paths into a number of different careers.

What GCSE Qualifications Support the Study of this Course?

Studying either GCSE Physics or GCSE Combined Science will give you a grounding in Physics to start A level. Students should be comfortable with using and applying Maths in Science, so strong Maths skills are key.

What are the Qualification Requirements for this Course?

GCSE Physics and either Biology or Chemistry (Separate Sciences): Grade 6

Or

GCSE Combined Sciences 6/6

How is the Course Delivered?

A level Physics is delivered as 5 hours per week taught lessons and are expected to complete a further 5 hours of independent study outside of lesson time.

There is a wide variety of ways in which the lessons will be delivered from practical work for the practical endorsement, exam practice and Google classroom.

Subject Overview		
Half Term	Year 12	Year 13
Autumn 1	Particles, Radiation & Quantum Phenomena	Nuclear
Autumn 2	Waves & Optics	Gravitational Fields
Spring 1	Materials & Mechanics	Electric Fields & Capacitors

Spring 2	Electricity	Magnetic Fields
Summer 1	Further Mechanics	Option Module: Astrophysics/Medical Physics/Engineering/Turning Points in Physics
Summer 2	Thermal Physics	Exams

How is the Course Assessed?

There are three 2 hour exams taken at the end of Y13.

Paper 1 - Measurements and errors, Particles and radiation, Waves, Mechanics and materials, electricity and Periodic motion. 2hr written paper (85 marks) (34% of the A level)

Paper 2 - Thermal Physics, Fields and their consequences and Nuclear Physics. 2hr written paper (85 marks) (34% of A level)

Paper 3 - Section A: Compulsory Practical skills and data analysis.

Section B: Optional unit - 2hr written paper (80 marks) (32% of the A level)

There is also a Practical Skills Endorsement certificate which is graded as a pass or fail based on your ability to carry out 12 required practicals independently during the 2 years.

What is our Recommended Subject Reading list to Support your Study?

<https://science.outwood.com/post-16-study/a-level-physics>

<https://www.alevelphysicsonline.com/aqa>

<https://www.youtube.com/user/ScienceShorts>

<https://www.physicsandmathstutor.com/physics-revision/a-level-aqa/>

