

# PHYSICS



**Examination Board:** AQA **Qualification:** A level

**Teacher Contact:** Mrs Hobbs and Mr Cooper

**Entry Requirements:**

A grade B in Mathematics and at least a B in GCSE Physics or Additional Science.

**What will I study and how will I be assessed?**

The first year course is comprised of the following topics:

- 1 Measurements and their errors**
- 2 Particles and radiation**
- 3 Waves**
- 4 Mechanics and materials**
- 5 Electricity**

The first year course is assessed in two papers of 1 hour 30 minutes, each contributing 50% of the grade and involving questions from any of the 5 topics. Students must also take part in 6 practical investigations to develop their skills and understanding of experimentation.

The second year course is comprised of the five AS topics, plus:

- 6 Further mechanics and thermal physics**
- 7 Fields and their consequences**
- 8 Nuclear physics**
- and one additional topic from the following options:
- 9 Astrophysics**
- 10 Medical physics**
- 11 Engineering physics**
- 12 Turning points in physics**
- 13 Electronics**

A Level Physics is assessed in three 2 hour exams. Papers 1 and 2 have content from topics 1 to 6 and 6 to 8 respectively. Paper 3 has questions on practical experiments, data analysis and questions on the optional topic. Students take part in 12 practical investigations to develop their skills and understanding of experimentation.

**Am I suited to this course?**

You would be well-suited to studying A level Physics if you:

- have enjoyed studying Science at GCSE level
- have a good mathematical ability and an eye for detail
- enjoy conducting experiments
- can think logically and apply knowledge to unfamiliar situations
- are willing to persevere with new concepts and to work hard throughout the course
- enjoy a challenge!

**What other subjects does it complement?**

Physics combines well with other Science subjects, Mathematics and Psychology. Combining Physics with Languages or Business Studies adds breadth for students considering degree courses such as Law. In order to assist the study of Physics, it is recommended that you also study Mathematics at A level, but it is not essential.

**Where can it lead?**

Physics leads to a wide range of courses and careers. These include Engineering, Medicine, Veterinary Science, Astrophysics, Computing and Mathematics, Radiography, Materials Science and Physics itself. Physics is also suitable for combined Arts Science degrees or other subjects such as Physics and French, Philosophy and Law. Physics is held in extremely high regard by employers and Higher Education institutions as it is a highly academic subject.

**What has been said?**

*‘AS Physics is a challenging but exciting course. Links to real physics makes this course even more likeable. We really enjoyed learning about waves and quantum physics.’ – Year 12 student.*

