

PHYSICS

A Level - AQA

Aims of the course

A level physics aims for students to:

- Sustain and develop their enjoyment of, and interest in, physics.
- Develop essential knowledge and understanding in physics.
- Develop the skills needed for the use of this knowledge and understanding in new and changing situations where appropriate.
- Develop an understanding of the link between theory and experiment.
- Appreciate how physics has developed and is used in present day society.
- Show how physics links with social, philosophical, economic, industrial and environmental matters.
- Recognise the quantitative nature of physics.

What are lessons like?

You will study this subject for five hours a week in a science laboratory. Opportunities are given for students to study some aspects of the course at Hull University and on extra-curricular trips. Course Content.

Drawing on market research with practicing teachers we will aim to engage students by:

- Enabling the use of motivating and up-to-date contexts from physics in the news - Seamlessly integrating the 'How Science Works' strand, providing progression from the new science GCSEs.
- Develop essential knowledge and understanding in physics and the applications of physics, with an appreciation of their significance and the skills needed for the use of these in new and changing situations.

Topic Titles:

Periodic Motion
Thermal Physics

Further topics for study are selected by teaching staff from a list of options as per the course specification.

These units develop a broad based understanding of physics and form an excellent platform for a range of undergraduate courses.

What are the exams like?

Students will take the full A Level examinations during the summer of Y13. In addition, there will be the opportunity to earn a practical skills endorsement over the two years.

Recommended Prior Learning and Entry Requirements

This course builds on the knowledge and understanding of the current suite of

GCSE Science courses. It is expected that you will have achieved a **GCSE grade 6 or above in this subject from a higher tier paper**. You will need to be able to communicate effectively and research information from a variety of sources. During this course you will also be expected to handle and interpret data, so a secure understanding of **GCSE Mathematics (grade 6)** and **English (grade 4)** is required. **It is also a requirement that you study A-Level mathematics alongside the physics course.**

Recommended Additional Reading

- www.aqa.org.uk
- www.s-cool.co.uk
- Head Start to AS Physics—CGP
- A Level Physics Revision Guides—CGP (AQA)

Where can this course lead to?

- A Higher National programme (HNC & HND) to degree level
- Courses such as Physics, the Sciences, Medicine and Engineering
- Chemical Engineering and related programmes
- Employment in the area of radiography and biotechnology

Why choose to study Physics at St Mary's?

Physics is a wonderful science that gives you the opportunity to go onto many areas including dentistry, veterinary science, radioactivity and medicine. The course is delivered by two members of staff that have a great deal of expertise in delivering the subject. Many students will be able to study in the secure knowledge that the department knows you from KS4 lessons and that, most importantly, you know them! We also welcome new students from all schools and colleges who help us to provide the diverse, fresh and stimulating learning environment we strive for.