

Physics

About the Subject

Physics is the science which underpins all others; it is ultimately the study of how the universe works. It is a dynamic subject which is constantly developing, and there are always new ideas to be explored. Physicists ask the really 'big questions', such as: How did the universe begin? How will the universe change in the future? How does the Sun keep on shining? What are the basic building blocks of matter?

If you are fascinated by these questions, you will enjoy studying Physics at A-Level and beyond.

Studying Physics at St Wilfrid's will allow you to explore the subject and develop your skills in a supportive environment where the focus is on your development. You will be supported by a dedicated teaching team, who are committed to ensuring all students achieve their potential. We have an open door policy and provide targeted support to ensure you reach your goals.

In addition, we are passionate about Physics and our aim is for you to feel the same! You will be encouraged to pursue a deeper understanding of the subject through wider reading and we often provide opportunities to experience what studying Physics at university or pursuing a related career is like, by running trips or inviting guest speakers. Recent sixth form visits include attending lectures at Manchester University and practical workshops at Liverpool University.

Course Content

The first year of the course will introduce you to four main topic areas: Forces and motion; Current and electricity; Waves; Quantum physics.

Much of this will build on what you learned at GCSE, but some ideas, such as quantum theory, will be brand new and may change the way that you look at the universe!

The second year, in addition to the above areas, will also cover: Thermal Physics, Circular Motion and Oscillations, Gravitational Fields, Astrophysics and cosmology, Capacitors, Electric Fields, Electromagnetism, Radioactivity and Medical Imaging.

Assessment is in the form of 3 written exams at the end of the course.

You will also have plenty of opportunities to enhance your practical skills throughout the course. You will develop skills in planning, implementing, analysis and evaluation, providing you with excellent preparation for practical work in scientific careers and at university.

Exam Board: OCR **Specification Title:** Physics A
Specification code: H556