

## **WHY CHOOSE PHYSICS?**

Our course is designed with the variety of needs and careers of the Sixth Form student in mind. Physics is one of the most exciting and dynamic areas of Science.

The course is structured in such a way as to capture this excitement in order to enable students to join in the growing understanding that physicists have of the universe's structure and the arguments used to understand it. In addition students learn to solve the problems that make Physics so applicable to modern life.

## **HOW USEFUL WILL IT BE?**

Physics is a subject with great prestige for career opportunities. It demonstrates an ability to think clearly and logically to solve problems, a skill which is useful in all professions. When this is combined with the shortage of physicists in industry and the difficulty that universities and colleges have in filling their Physics-related courses, Physics A or AS Level becomes a very useful qualification to achieve.

## **WHAT WILL YOU NEED TO DO TO BE SUCCESSFUL?**

To study this subject you will need a minimum of five GCSE subjects at Grade A\*-C. A level Physics students need to have a grade A\*A\* to BB in Science double GCSE as well as A\* to B in GCSE Maths. Also attention is paid to the attitude to Science in Years 10 and 11 and to the increasing maturity and dedication to work in the Sixth Form.

Maths features heavily in A Level Physics and students should feel confident solving mathematical problems and rearranging equations before applying.

Taking A Level Maths will reinforce and help students come to grips with many topics in the Physics A Level. For this reason we would recommend students study both Physics and Maths, but must stress that this is not essential.

Students will need to do at least five hours study per week in addition to lessons, if they are to reach the depth of understanding to do well at A or AS Level.

With such a volume of work and the diversity of tasks, it is necessary that students are able to study effectively and discuss difficulties with other students and their teacher. Students must display initiative, enthusiasm and self-discipline to succeed.



### **WHAT WILL YOU NEED TO STUDY ON THE COURSE IN YEAR 12 – THE AS LEVEL?**

Currently our department follows the AQA Physics syllabus. You will study Particle Physics, Quantum phenomena and electricity before the January examination. In the second half of the year you will study wave behaviour, optics, mechanics and materials.

### **HOW IS THE AS LEVEL ASSESSED?**

The AS course is assessed through two exams, each accounting for 40% of the AS, and an ISA which provides the coursework element of the course and accounting for 20%.

### **WHAT WILL YOU STUDY ON THE COURSE IN YEAR 13 – THE A2 LEVEL?**

In the A2 year you will study the universe and models we can apply to study it. We shall also look at electromagnetism, the thermal properties of matter and the fundamental particles of matter.

### **HOW IS A2 LEVEL ASSESSED?**

Like the AS course, the A2 qualification is assessed through two exams and an ISA.

### **HOW MUCH TIME WILL YOU HAVE TO SPEND ON PRIVATE STUDY/RESEARCH?**

AS Level: at least 4 hours per week.

A2 Level: at least 5 hours per week.



**Mr M Calvesbert**



**Mr R Acason**

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**For further information please contact: Mr M. Calvesbert**