Spalding Grammar School Sixth Form

Subject Information

Physics

Entry Requirement:

Grade B in GCSE Physics or AA in GCSE Double Award Science. Grade 7 in GCSE Mathematics. Please note, Physics must be studied alongside A Level Mathematics.

Awarding body: AQA

About the subject: Physics is crucial to understanding the world around us, the world inside us, and the world beyond us. Physics encompasses the study of the universe from the largest galaxies to the smallest subatomic particles. It is the most basic and fundamental yet far-reaching science. Physics challenges our imaginations with concepts from relativity to string theory and provides the foundations for most of the major technological advances of mankind, from computers to lasers to putting the first person on Mars...sometime soon.

A Level Physics offers:

- A stepping stone to a wide variety of rewarding careers: from physicist or engineer to doctor or banker.
- The opportunity to learn about how the universe works
- Broad training in skills that all employers value by developing strong problem-solving, analytical, mathematical and ICT skills. Even if you do not end up working in a physics-related industry, these skills are still highly regarded.

Assessment:

All examinations take place at the end of Year 13. The third paper requires students to demonstrate understanding and knowledge of practical skills and answer questions on a chosen module. The optional modules offer the possibility of studying Astrophysics, Medical physics, Engineering physics, Turning Points in Physics or Electronics. There is also the internally assessed Practical Endorsement skills certificate, which is based on practical skills developed throughout the course.

Paper 1: 34% of A level

- Particles and radiation.
- Waves.
- Mechanics and materials.
- Electricity.
- Further mechanics.

Paper 2: 34% of A Level

- Thermal physics.
- Fields and their consequences.
- Nuclear physics.

Paper 3: 32% of A Level

- Measurements and their errors across a range of 12 practical activities.
- The options module.