

Physics

What will I learn?

The S3 Physics course is broadly based around the content of level 4 CfE outcomes. These outcomes give teachers scope to explore many interesting and up-to-date aspects of Physics including medical physics, use of super magnets and our increasing knowledge of the universe. There are 4 main units described below:

- Density and Kinetic Theory- exploring density and the gas laws.
- Electronics- how electronic systems work and digital and analogue signals
- Magnetism-magnetic theory and commercial application of electro and super magnets.
- Space- evolution of the universe and the electromagnetic spectrum.

What skills will I improve?

The topics have been planned to allow pupils to progress their knowledge of physics from the foundations of S1 and S2 Science. In order to prepare pupils effectively for progression onto N4 and N5 biology the S3 course will also have a strong skills focus. Staff have analysed the new N4/5 qualifications and selected out specific skills which pupils need to develop in order to succeed as they continue to study physics. For example:

- Numeracy- pupils will develop their selecting, processing, presenting and analysing skills by looking at experimental data.
- Literacy- pupils will be exposed to increasingly complex vocabulary and encouraged to develop their skills in describing and explaining physical concepts. Scientific report writing skills will also be improved through continued practise and feedback.
- Practical- pupils will carry out increasingly complex and interesting experiments which they will have a hand in planning.
- ICT- pupils will make use of the internet to research new and interesting areas of physics before making summary reports of their findings.
- HWB- pupils have the chance to discuss a number of medical applications of physics which is intended to improve their understanding of how essential physics is for the modern world.

How will I be assessed?

The knowledge content of the course will be assessed continuously as the course progresses and through an end of unit test. Literacy and numeracy skills will also be assessed as pupils progress in class with some skills based questions in the end of unit test as well.

What homework will I get?

Homework tasks will be issued on a regular basis (around 1 per fortnight) and vary from question sheets to research tasks or posters. It is expected that pupils will also begin looking over work from class at home in order to prepare them for effective study skills in the senior phase.

What can I do next?

The S3 Physics course is essential for studying physics in the senior phase at various levels and will also be effective preparation for various other courses on offer at the colleges:

- N4 Physics
- N5 Physics
- Higher Physics (in S5/6)
- Advanced Higher Physics (in S6)
- Other Science courses at college
- University courses

