

Physics Higher

Award Received

Higher Physics is graded A –D.

Entry Level: What do I need to do it?

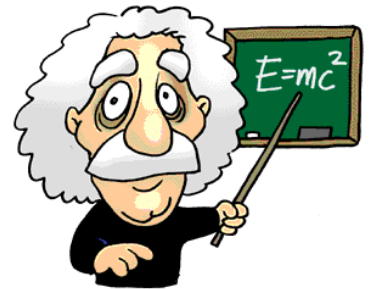
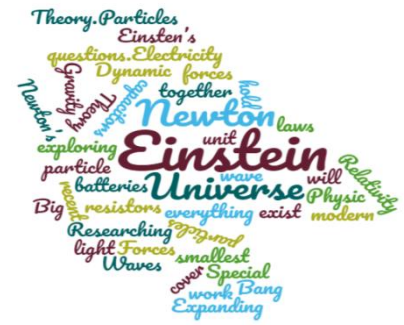
You should have, (or be predicted to get) a grade A or a good grade B in National 5 Physics.

Course Content: What will I learn?

This is currently under review by the SQA, however there should be little change to the content.

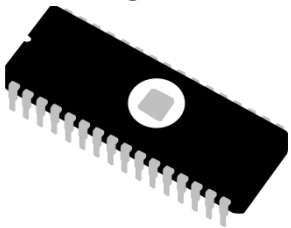
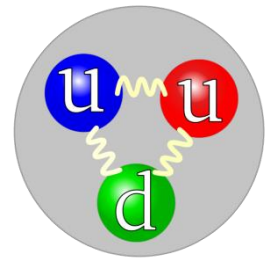
Our Dynamic Universe:

In this unit you will look at traditional physics with Newton's laws of Forces and Gravity. More modern physics with Einstein's Theory of Special Relativity. Then cover some of the most recent work on The Expanding Universe and The Big Bang Theory.



Particles and Waves:

Is light a particle or a wave? What are the smallest particles that exist? What forces hold everything together? In this unit we will be exploring these questions.



Electricity (Half Unit):

This unit builds on your knowledge of electricity from National 5. You will find out more about power supplies, capacitors, semiconductors, designing circuits and their practical applications.

Researching Physics (Half Unit):

In this unit you will apply skills of scientific inquiry and draw on knowledge and understanding to research the underlying physics on a topic new to you eg: exoplanets, earthquakes or wind turbines. You will complete two experiments and internet research on this topic. To pass this unit you need to record your work in a day book. This will form the bases for your assignment.



Teaching Methods: What will I do?

Experiments, tutorials, DVDs, demonstrations, investigations, and research. You will be issued with Learning Outcomes, Summary Notes and a text book. We also use Scholar and Edmodo. Revision question books and past exam paper questions are used to practise answering questions.

Assessment: How will I be assessed?

You will be assessed as follows:

- * End of Unit Tests, covering knowledge and understanding and problem solving
- * Final exam, covering knowledge and understanding and problem solving,
- * Assignment, including experiments, researching and reporting on a relevant topic.

Homestudy.

Homework will be issued on a regular basis and students will also be expected to read their Summary Notes regularly, learn equations and revise for unit tests. The more past paper question you can do the better your results will be.

Homestudy is an essential part of the course and allows each student to review and consolidate work covered in class and identify/address their weaknesses. It is a very important indicator of your progress throughout the course



Progression in the Senior Phase.

High achieving and committed Higher Physics students will be recommended to progress to the Advanced Higher level of study.

The National 5 Practical Electronics course is recommended if you wish to broaden your knowledge and skills.

