

FACULTY	SCIENCE
TITLE OF COURSE	PHYSICS
LEVEL	HIGHER
RECOMMENDED ENTRY LEVELS	An A or B grade pass at National 5 Physics A pass in National 5 Maths

Which topic areas are covered in Higher Physics?

- ***Our Dynamic Universe***
(Motion; Forces, Energy & Power; Collisions, Explosions & Impulse; Gravitation; Gravity & Mass; Special Relativity; Expanding Universe; Hubble's Law; Big Bang Theory)
- ***Particles & Waves***
(The Standard Model; Forces on Charged Particles; Nuclear Reactions; Wave Particle Duality; Interference & Diffraction; Refraction of Light; Spectra)
- ***Electricity***
(Monitoring & Measuring a.c.; Current, Potential Difference, Power & Resistance; Electrical Sources & Internal Resistance; Capacitors; Conductors, Semi-conductors & Insulators; p-n Junctions)

Which skills are taught?

- Scientific and analytical thinking skills in a Physics context
- Problem solving skills in a Physics context
- Understanding the role of Physics in scientific issues
- Acquire and apply knowledge and understanding of concepts in Physics
- Develop an understanding of relevant applications of Physics in society
- Develop literacy and numeracy skills
- Develop employability and enterprise skills.

Is there an external examination in the subject? Yes

Internal unit assessments: This assessment will be updated by the SQA for 2017-18.

What kind of homework is given to support learning?

Knowledge and understanding, problem solving, using equations, research projects including scientific report writing and investigations.

How often is it issued?

Homework is issued on a regular basis throughout the week.

What careers would benefit from a knowledge of the subject?

A vast number of careers benefit from a knowledge of Physics. For example: Medicine, Engineering; Oil Industry; Architecture; Meteorology; Teaching; Space; Chartered Surveying; Journalism; Astronomy; Airline Pilot; Computing; Archaeology; Geology; Oceanography; Laboratory Technician.

How can parents help?

Encourage students to take responsibility for their own learning and seek support where necessary.