

**Curricular Area:** Science

**Course Title:** Physics National 4

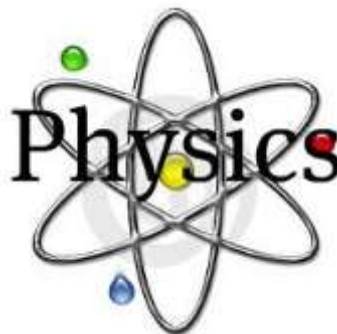
### **Course Description**

This course is intended for students who have not studied Physics before and have done National 4 Biology or National 4 Chemistry in S4.

The course develops an understanding of the importance of Physics related issues facing the individual and society.

There are 3 units of study:

- Electricity and Energy
- Waves and Radiation
- Dynamics and Space



The course is designed to allow students to investigate the advantages and disadvantages of different ways of generating electricity, looking forwards to a more sustainable energy supply for the future. Sound generation and noise pollution are investigated as well as nuclear radiation and its impact on our lives as well as on society/the environment. Satellites and Cosmology are studied in the third unit.

### **Entry requirements**

There is no formal entry requirement.

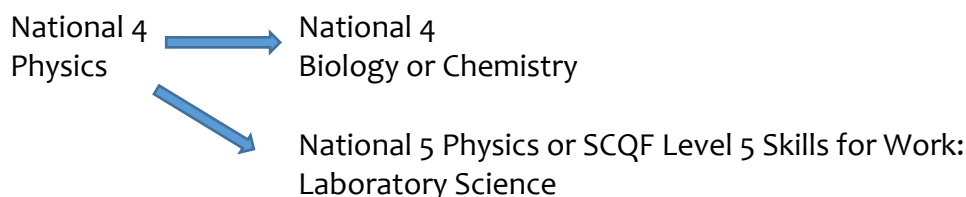
### **Assessment**

At National 4 level students are assessed on their ability to make accurate statements, related to key areas of content and successfully perform solving problem skills, (in Key Area assessments), as well as their ability to plan, carry out and write up a practical investigation. Students will be applying skills of scientific enquiry throughout the course. During the Added Value Unit students will carry out an in-depth investigation or piece of research into an unfamiliar area of Physics and then present their findings.

### **Home Study Expectations**

Students are issued with home study either weekly or fortnightly depending on the demands of the part of the course being studied. Home Study tasks will vary and could include research, consolidation of learning and writing up experiments.

### **Possible next level of study**



**Wider Achievement Opportunities**

Students have many opportunities to explore and develop their investigative and practical skills in Physics. There are also opportunities to be involved in debates about contemporary controversial issues related to the impact of Physics.

**Possible career paths**

The study of Physics at this level is a good stepping stone to other Science courses at school or college.

For more information see <http://www.physics.org/careers.asp?contentid=381>