National 4 and 5 Environmental Science

What are the aims of this course?

The purpose of the Environmental Science course is to develop learners' interest and enthusiasm for the subject by tackling issues such as global climate change, pollution, use of land and water resources and changes in wildlife habitats. It involves using investigative and experimental skills to develop an understanding of scientific principles, economic influences and political action. Environmental science takes a problem solving approach to attempt to develop solutions that prevent or reverse environmental deterioration and aim for sustainable practices.

What will I be learning about in this course?

The course is made up of three units:

- Living Environment
- Earth's Resources
- Sustainability

In addition to this you will need to complete a piece of independent research which will be assessed and count towards your final grade.

Living Environment

The topics you will study in the living environment are:

- Investigating ecosystems and biodiversity
- Interdependence
- Human influences on biodiversity

Earth's Resources

The topics you will study in earth's resources are:

- Overview of Earth's systems and their interactions
- Geosphere
- Hydrosphere
- Biosphere
- Atmosphere

Sustainability

The topics you will study in sustainability are:

- Introduction to sustainability
- Food
- Water
- Energy
- Waste management

What skills will I develop?

You will develop a number of essential skills that are specific to Geography and Science as well as some that are transferable to other subjects. Skills developed include observing, describing and recording; comparing and contrasting to draw valid conclusions; development of problem-solving skills; developing critical thinking through accessing, analysing and using information from a wide variety of sources; using maps in a variety of contexts; and applying skills in interpreting and displaying graphical information.

Learners will also develop skills necessary for learning, life and work by improving their communication, team-working and presentation skills.

What learning and teaching approaches will I experience?

Learning will involve a variety of classroom activities such as cooperative learning, active learning and the use of thinking skills. Visiting speakers will enhance learning as will the many opportunities for fieldwork, practical work and outside visits.

How will I be assessed?

National 4 pupils will need to pass all unit outcomes for each of the three units as well as completing an Added Value Unit which consists of a report on a piece of independent research. These will be assessed internally on a pass/fail basis.

National 5 pupils will need to pass all unit outcomes for each of the three units as well completing an Assignment, which is a write-up of a piece of independent research, completed under exam conditions and assessed externally out of 20 marks. There will also be an external exam which is marked out of 100. The final award will therefore be marked out of a combined total of 120 marks and graded A-D.

What are the homework requirements?

Homework plays an important part in regular revision of key words and ideas, reinforcement of class work, independent research and writing-up fieldwork reports.

What might this course lead to in the future?

This course will lead learners into National/Higher Geography, Higher Environmental Science, Biology and Chemistry and skills for work courses such as Travel and Tourism.