

# National 4 Environmental Science (Course Code: C726 74)

SCQF Level 4 (24 Credit Points)

### Why study Environmental Science?

Environmental scientists are involved in tackling issues such as global climate change, pollution, use of land and water resources and changes in wildlife habitats. It involves an understanding of scientific principles, economic influences and political action.

This course provides a broad and up to date selection of ideas relevant to the central position of environmental science in society. You will investigate key areas of the living environment such as biodiversity and interdependence.

The skills that you learn while studying Environmental Science, such as investigating, critical thinking, project management and survey techniques, are valuable in a wide variety of industry sectors including renewable energy, forestry and environmental conservation and agriculture.

#### **Career Pathways**

To see what career areas this subject could lead to and the routes to get there, download and view these career pathways:

Animals, Land and Environment

Information, Culture and Heritage

Science and Maths

# What do I need to get in?

Entry is at the discretion of the school or college but you would normally have achieved one of the following:

- National 3 Biology
- National 3 Chemistry
- National 3 Environmental Science
- National 3 Geography
- National 3 Physics
- National 3 Science

### What will I study?

Environmental Science is a practical subject that helps us to develop ways of preventing or reversing damage to the natural environment. You will learn about changes in wildlife habitats, and sustainable ways of managing our use of land and water resources. This will help you to make your own decisions on contemporary issues where scientific knowledge is constantly developing.





The course has three compulsory units, plus an added value unit that assesses your practical skills.

#### **Environmental Science: Earth's Resources (6 SCQF credit points)**

In this unit you will:

- develop your knowledge and understanding of the Earth's resources
- investigate the use and conservation the responsible use and conservation of non-renewable and renewable resources
- the formation and use of fossil fuels
- study the derivation and uses of materials derived from crude oil
- explore the risks and benefits of different energy sources
- investigate the carbon cycle and the causes and implications of changes in the balance of gases in the air.

### **Environmental Science: Sustainability (6 SCQF credit points)**

In this unit you will:

- develop your knowledge and understanding of sustainability
- research the sustainability of natural resources
- study the interaction between humans and the environment
- explore the role of agriculture in the production of food and raw materials
- research society's energy needs and development of sustainable systems.

Note: The above units may be taken with a Scottish Context option, which contributes towards the Scottish Studies Award.

**Environmental Science: Living Environment (6 SCQF credit points)** 

In this unit you will:

- develop your knowledge and understanding of the living environment
- research interdependence, adaptation for survival, the impact of population growth and natural hazards on biodiversity
- study the nitrogen cycle and environmental impact of fertilisers.

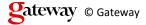
#### Added Value Unit: Environmental Science Assignment (6 SCQF credit points)

In this unit you will:

- carry out an investigation using the skills and knowledge you developed in the other three units
- investigate a topical issue in environmental science from a selection
- produce a written summary of the research based on your findings.

### How will I be assessed?

Your work will be assessed by your teacher on an ongoing basis throughout the course. Items of work might





#### include:

- practical work such as practical experiments
- written work research assignments and reports
- projects
- class-based exams.

You must pass all the units including the assignment to gain the course qualification.

# **Study Materials**

# What can I go on to next?

If you complete the course successfully, it may lead to:

National 5 Environmental Science

Further study, training or employment in:

- Animals, Land and Environment
- Information, Culture and Heritage
- Science and Mathematics