



## How will I be assessed?

On the AS course there is one summer examination which counts for 100% of the AS course.

On the A level course there are two summer examinations each contributing 50% of the final A level. These exams will be taken at the end of the second year. It is also a requirement of the course to complete a minimum of two days field study as well as laboratory based activities.

## What extra work can I do?

Wide reading is really essential and is encouraged, as is the use of a wide range of other media (television, radio, internet) to broaden and enrich the Environmental Science course. The department assists students in acquiring extension books, articles and appropriate periodicals and will also advertise relevant lectures and courses that students can attend.

## What skills will I develop during this course?

*Communication:* undertake group discussions, make a presentation, select information from extended references and analyse key information, use appropriate language to write a report and practical account.

*Application of Number:* handle data in a variety of contexts including) statistical techniques; graphs, charts and diagrams.

*Information Technology:* identify information needed and suitable sources, carry out searches, select relevant information.



## Environmental Science AS/A Level AQA

## What is the course about?

The AS course is divided into two units which are:

### The Living Environment

An introduction to the biodiversity of life on Planet Earth.

The reasons why the conservation of life on Earth is important are investigated, as are the methods which may be used to achieve effective conservation.

Conservation in the UK, coral reefs, mangroves, Antarctica and tropical rainforests are used to develop these issues further.

Life Processes in the Biosphere allows consideration of the ecological relationships between organisms and their abiotic environments in order to understand conservation problems further and how these may be managed.

### The Physical Environment

Physical resources such as atmospheric gases, water and mineral nutrients are essential for life on Earth.

Humans exploit and manage physical resources to provide higher material living standards. The use of many of these resources is unsustainable.



The A2 course has the same AS units but also includes:

### Energy Resources

Future problems of energy supply and how these may be resolved are investigated through the study of the energy resources which are available and their many applications as well as investigating how improvements in technologies can increase the amounts of energy from sustainable sources.

### Pollution

The properties of pollutants are considered to explain why some materials or forms of energy cause environmental damage. These issues are developed through the study of a range of atmospheric, aquatic and terrestrial pollutants investigating both historic and contemporary pollution events. The strategies which may be used to minimise releases, treat effluents and manage the damage caused are considered.

### Biological Resources

The factors controlling human population growth are considered in relation to the demands placed upon the planet's resources and life-support systems. Food production (from agriculture, fishing and fish farming) and forestry systems are analysed, with particular emphasis on the limiting factors affecting productivity, the environmental problems caused by these systems and the ways in which problems can be addressed.

### Sustainability

The study of the sustainability of human lifestyles allows synoptic consideration of the other modules of the specification.

### Research methods

The methods used to investigate a wide range of environmental issues will be studied. This will be done both in the laboratory as part of fieldwork studies

### What is the department like?

The Department is housed in 4 well-equipped and newly refurbished laboratories and is well resourced with a wide range of modern apparatus, texts and reference resources. The enthusiastic members of the departmental teaching team aim to build carefully upon the scientific skills and knowledge of the National Curriculum. Regular tutorials are valuable both to help students experiencing difficulties and to extend and encourage individuals to strive for personal excellence. The course follows a carefully structured scheme of work.

### What sort of work will I be doing?

Teaching and learning take advantage of a wide range of approaches including lectures, interactive class discussions, individual guided study (involving the wide-scale use of 'flexible learning guides') and open-ended study. Practical and fieldwork forms a very important part of the course and students undertake some laboratory based practical work as well as up to four days of fieldwork.

### What are the entry requirements?

Five grade 4s at GCSE with two grade 5s in GCSE Science together with GCSE Maths at grade 4

## WHAT ARE THE PROGRESSION ROUTES FOR THIS QUALIFICATION?

Environmental Science is a worthwhile choice for students who are particularly interested in studying Biology, Geography and Environmental Science or who are considering a career in ecology, countryside management, wildlife conservation, marine biology and planning. Career prospects following on from a degree in Environmental science could include [Environmental consultant](#), [Environmental education officer](#), [Environmental manager](#), [Nature conservation officer](#), [Recycling officer](#), [Sustainability consultant](#), [Waste management officer](#), [Water quality scientist](#), [Environmental health practitioner](#), [Landscape architect](#), [Town planner](#), [Toxicologist](#) or [Transport planner](#).