A Level

# Environmental Science

AQA

**If you choose not to continue this subject to year two, you are able to sit an AS exam at the end of year one.**

## Course Content

The course provides the knowledge necessary to understand the fundamental processes of the various systems of planet Earth, how human activities affect the planet and what we can do to reduce our impact. The underlying theme is 'How can increasing numbers of people have a good quality of life without damaging the life-support systems of the planet?'

In the **first year** there are two main areas of study:

1. The living environment: wildlife conservation including the importance of biodiversity, habitat conservation and captive breeding and release programmes.
2. The physical environment: the impact of human activities on physical processes and how these can be managed, including climate change, exploitation of water and geological resources.

Environmental issues such as melting ice sheets, coral reef decline and the discovery of new water sources are explored, with the emphasis on how to find solutions to these environmental problems through improved management and use of new technology. Many sides of the issues are discussed to enable you to form well-balanced opinions which you can support with logical arguments and objective scientific evidence.

In the **second year** there are four main areas of study:

1. Energy resources
2. Pollution
3. Biological resources
4. Sustainability

The applied nature of the subject means that there are many opportunities to relate topics to everyday issues and current affairs.

The Environmental Science course involves a range of teaching and learning methods. These include laboratory investigations, problem solving, critical evaluation of data sources and synthesising information from a variety of sources. Workshop support is available every lunchtime.

The department runs a number of field trips including practical woodland management, Marwell Zoo, an aquaculture centre and studying ecological building design. There may be opportunities for overseas expeditions, which have previously visited Kenya, Belize, Madagascar and Guyana.

Students with an interest in practical conservation can assist with the management of a woodland nature reserve, which we are developing to increase its wildlife value.

The applied nature of the subject means there are many opportunities to relate topics to topical issues and current affairs.

# Environmental Science

## Methods and Patterns of Assessment

The A level is assessed in June of the second year in two written exams. Students can take 1 AS examination in May/June of their first year, enabling those students who are not studying this subject in the second year to earn a qualification.

## Financial Implications

**The textbook will be approximately £30.00, plus there is a £10 fee for online resources. Day-trips are, with one exception, optional and should cost no more than £20 per trip (prices will vary according to the type of trip). There is one fieldtrip in the spring which all students are expected to attend, but there is no charge for this. The price for residential trips includes all transport, accommodation, visits, meals and insurance. Exact prices will be available once trip details are finalised.**

## Career Possibilities

Environmental Science is a very wide subject, accepted by universities as a relevant science, not only for Environmental Science degrees, but also for related degrees such as oceanography, geology, marine biology and zoology. It can lead, with appropriate other subjects, to a wide range of careers including wildlife conservation, water industry, energy industry, environmental health, agriculture, forestry, fisheries, teaching, journalism, environmental law, tourism, sustainable architecture, among many others.

Past students are employed in a variety of fields, including the petrochemical industry, biodiversity and conservation research (in the UK and abroad), environmental monitoring and management in the nuclear industry, veterinary science and agrochemicals.

## Minimum Entry Requirements

**5 GCSEs at grade A* - C, including Maths and English, plus a B in any of the following GCSEs:**

- **Additional Science**
- **Biology or Chemistry or Physics**

**If you do not have a B in the above Sciences you will need to have achieved a grade 6 or above in GCSE Maths.**

**Apply online: www.psc.ac.uk/apply t: 01962 857555 e: admissions@psc.ac.uk**

Peter Symonds College, Owens Road, Winchester, Hampshire SO22 6RX