AS Environmental Studies Programmes for AQA

FSC programmes are fixed length courses with clearly stated outcomes and links to curriculum specification requirements

The Science of Living and Physical Environments

3 days

High Quality teaching

The teacher delivering the content plays a vital role in ensuring successful learning outcomes are achieved.

This is why every FSC Centre has taken great care in developing a qualified team of highly trained and CRB checked field teachers working full time, all year round.

Not only are they experts, they are gifted teachers with a real passion for the subject being taught. FSC field teachers are the reason why many schools return year after year.

Quality Badge awarded by

Council for Learning Outside the Classroom

External Recognition of Quality

All our centres have either been awarded the Quality Badge by The Council for Learning Outside the Classroom, or are awaiting assessment. The badge is awarded to organisations that have demonstrated that they consistently deliver high quality teaching and learning experiences and manage risk effectively. **This means that you will have to complete less paperwork when visiting our centres.**

Protecting fieldwork opportunities for everybody

Growing pressures on outdoor learning has led the FSC to take on an important role; championing the rights and opportunities for people of all ages to experience the environment at first hand.

The FSC has lead in campaigns to reverse the continuing decline in fieldwork within secondary schools and to build opportunities for out-of-classroom learning. The FSC continues to work closely with the government and other partners to develop out-of-classroom learning.

As a registered charity, the FSC receives no statutory funding. It relies solely on fees charged for courses and membership. Therefore, by visiting an FSC Centre not only are you receiving a high quality educational experience for your students, you are also you are helping to protect fieldwork opportunities for everybody.

Please visit
http://www.field-studies-council.org/outdoorclassroom/
For alternative AS and A2 Programmes

OVERVIEW

This course provides students with the opportunity to study 'first-hand' a range of habitats in some of the most stunning locations in the UK. The course has been designed to enable the maximum time spent 'in the field', investigating biodiversity, conservation, ecological relationships and the physical environment. Students will be provided with opportunities to increase their understanding of the environment and develop and use their practical skills. The course will also provide students with opportunities to develop a comprehensive background in 'How Science Works' and solving scientific problems, while studying in the Outdoor Classroom.

PROGRAMME LENGTH

3 Days (2 nights with 6 teaching sessions)

Monday	Tuesday	Wednesday
Arrive for lunch. Afternoon and evening sessions	Morning, afternoon and evening sessions	Morning session. Depart after Lunch

Or

Wednesday	Thursday	Friday
Arrive for lunch. Afternoon and evening sessions	Morning, afternoon and evening sessions	Morning session. Depart after Lunch

Or

Friday	Saturday	Sunday
Arrive for lunch. Afternoon and evening sessions	Morning, afternoon and evening sessions	Morning session. Depart after Lunch

PROGRAMME CONTENT

Ecosystem Change (half day):
An investigation of the species diversity in an aquatic or terrestrial habitat.

Specification Section	Concepts	Practical Skills
Unit 1 Living Environment 3.1.3 Life Processes in the Biosphere Changes in ecosystems Diversity and ecological stability (half day)	• Environmental change and conservation • Species diversity and monitoring • Estimates of total numbers of species	• Species diversity index • Sampling of terrestrial or aquatic organisms

Soils (half day):
Soil analysis of a selection of different soils, including texture, organisms, pH, water and / organic matter.

Specification Section	Concepts	Practical Skills
Unit 2 The Physical Environment 3.2.3 The lithosphere Soils (half day)	• Components of soil • Properties of soil • Effect of soil properties on fertility and drainage	• Extraction of earthworms from soil • Methods and limitations of collecting soil-dwelling organisms • Methods of soil analysis including texture, organisms, pH, water and / or organic matter • Soil triangle

CHOOSE ONE TOPIC FROM THE LIST BELOW

Habitats (full day):
An investigation of a semi-natural terrestrial habitat and the habitat management practices affecting it.

Specification Section	Concepts	Practical Skills	Mathematical Skills*
Unit 1 Living Environment 3.1.2 Wildlife Conservation Conservation in the UK, UK Habitats (full day)	• Influence of human activities on habitats / species • Management practices and species that benefit	• Sampling techniques for organisms in air or vegetation • Tullgren funnels for soil and litter organisms	• t-test or Mann-Whitney U-test • Standard deviation • Bar charts or histograms

Adaptations (full day):
An investigation into the distribution and abundance of different species in an aquatic habitat.

Specification Section	Concepts	Practical Skills	Mathematical Skills
Unit 1 Living Environment 3.1.3 Life Processes in the Biosphere Adaption to the environment, Abiotic and Biotic factors (full day)	• Range of tolerance • Abiotic and biotic factors • Species interdependence • Habitat management	• Lincoln Index • Sampling of aquatic organisms	• Chi-squared test • Mean, median and modes

Succession (full day):

An investigation of a lithosere or hyrosere, considering the seral stages and affects of human activities.

Specification Section	Concepts	Practical Skills	Mathematical Skills
Unit 1 Living Environment 3.1.3 Life Processes in the Biosphere Changes in ecosystems Ecological Succession (full day)	• Seral stages • Changes in abiotic factors • Organisms and adaptations • Influence of climate, edaphic and biotic factors • Human activities and plagioclimaxes	• Use of abundance scales and their limitations • Random sampling using quadrats to estimate species frequency OR use of belt transects to record changes in species distribution • Measuring species density and percentage cover	• Spearmans Rank or Chi-squared • Scatter graphs and / or kite diagrams

* Some of the mathematical skills maybe carried out using specially selected secondary data sets.

LEARNING OBJECTIVES/OUTCOMES

Learning Objectives	Learning Outcomes
• Provide students with the opportunity to investigate 'first hand', the diverse habitats within the UK • Explore and evaluate a range of investigative and scientific techniques • Provide students with opportunities to consider the ethic, social and cultural implications of environmental studies • Support students in becoming responsible for their own learning and application of their skills to scientific investigation • Encourage students to contribute to a creative and collaborative working environment	**By the end of the programme we expect all students to be able to:** • Recall knowledge from specification content covered • Understand main environmental concepts from specification content covered • Use appropriate scientific knowledge • Present data in a variety of forms • Describe significant trends show by data • Critically comment on presented data or conclusions • Successfully carry out basic mathematical and practical skills • Plan experimental and investigative activities • Describe a range of practical techniques • Make observations and measurements • Interpret and explain the results of investigative fieldwork • Assess the validity and reliability of scientific data **We also hope that students will:** • Appreciate how environmental understanding can help to inform sustainable development and resource use • Be aware of the effect that human activities have on the environment, including the role of Conservation organisations in the UK • Understand and respect the various diverse environments and organisms that make up the UK landscape

FSC CENTRES

This programme is offered at our residential centres listed below, set in some of the most stunning locations in the UK.

FSC Centres that offer this programme:

BL	Blencathra	Tel: 01768 779 601
CH	Castle Head	Tel: 0845 330 7364
DF	Dale Fort	Tel: 0845 330 7365
DG	Derrygonnelly	Tel: 028 686 41673
FM	Flatford Mill	Tel: 0845 330 7368
KD	Kindrogan	Tel: 01250 870 150
OR	Orielton	Tel: 0845 330 7372
PM	Preston Montford	Tel: 0845 330 7378
RC	Rhyd-y-creuau	Tel: 01690 710 494

TO BOOK THIS PROGRAMME, SIMPLY:

1. Choose the time of the year you would like to attend
2. Pick the centre/centres of interest
3. Check availability online or contact head office using the details at the bottom of the page or contact the centre of your choice

**Please note to book this programme the minimum size of your group must be 12 students and 1 member of staff*

Please visit
http://www.field-studies-council.org/outdoorclassroom/biology/aqa/
for alternative A-level AQA programmes

The FSC prides itself on being flexible. If you can't find a programme to meet your exact requirements a course specifically tailored to meet your needs can be developed. To discuss this, contact the centre of your choice. Fees will depend on what time of year you would like to visit and your length of stay but will be more expensive than FSC programmes at peak periods.

PROGRAMME PRICES

Prices from 2010

3 day timetable Band A: £103 Band B: £117 Band C: £124 Band D: £138

Prices from 2011

3 day timetable Band A: £99 Band B: £112 Band C: £127 Band D: £145 Band E: £152

Week Beginning	Band	Week Beginning	Band	Week Beginning	Band
May 03 2010	D	October 11 2010	D	March 21 2011	D
May 10 2010	D	October 18 2010	D	March 28 2011	D
May 17 2010	D	October 25 2010	B	April 4 2011	D
May 24 2010	D	November 1 2010	D	April 11 2011	C
May 31 2010	B	November 8 2010	C	April 18 2011	B
June 07 2010	D	November 15 2010	C	April 25 2011	C
June 14 2010	D	November 22 2010	B	May 2 2011	D
June 21 2010	D	November 29 2010	B	May 9 2011	D
June 26 2010	D	December 6 2010	A	May 16 2011	D
July 05 2010	D	December 13 2010	A	May 23 2011	D
July 12 2010	D	December 20 2010	A	May 30 2011	B
July 19 2010	C	December 27 2010	A	June 6 2011	E
July 26 2010	A	January 3 2011	A	June 13 2011	E
August 02 2010	A	January 10 2011	A	June 20 2011	E
August 09 2010	A	January 17 2011	A	June 27 2011	E
August 16 2010	A	January 24 2011	B	July 4 2011	E
August 23 2010	A	January 31 2011	B	July 11 2011	E
August 30 2010	D	February 7 2011	B	July 18 2011	C
September 6 2010	D	February 14 2011	B	July 25 2011	A
September 13 2010	D	February 21 2011	C	August 1 2011	A
September 20 2010	D	February 28 2011	C	August 8 2011	A
September 27 2010	D	March 7 2011	D	August 15 2011	A
October 4 2010	D	March 14 2011	D		

Included within the programme price:

- Expert tuition by fully trained staff
- Rigorous and proven health and safety procedures including 24 hour emergency cover
- Access to risk assessments
- Full board (residential visits)
- Specialist equipment and exclusive access to specially developed resources
- Free places for visiting staff
- E-mail support before and after the course (on request)
- Personal and travel insurance

Please remember travel to the field centre and to fieldwork sites is not included in the programme fee.

FSC Head office, Preston Montford, Montford Bridge, Shrewsbury, Shropshire, SY4 1HW
Tel: 01743 852100 Fax: 01743 852101 Email: headoffice@field-studies-council.org Website: www.field-studies-council.org