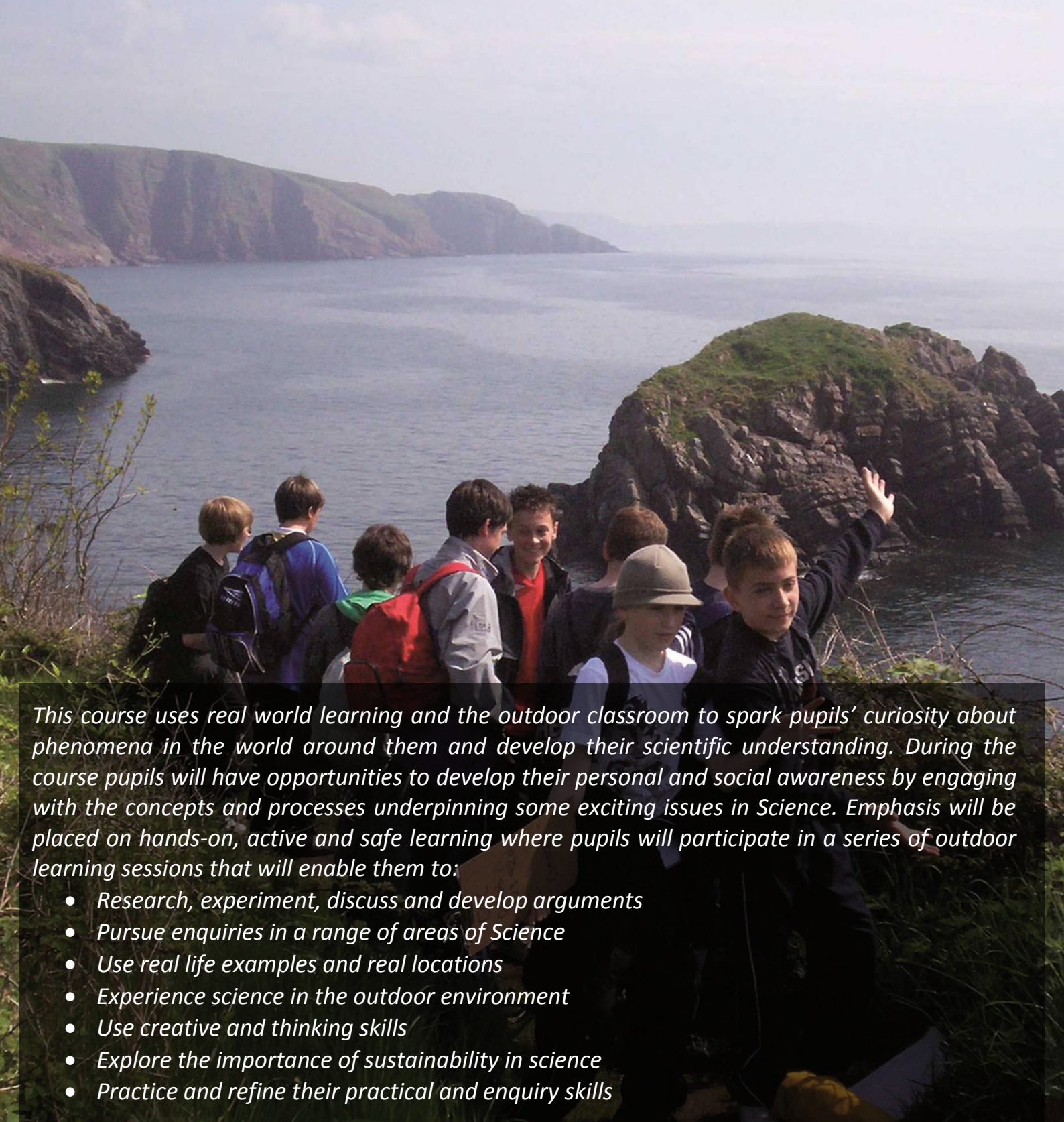


Key Stage 3 Science

How Science Works, 3days



This course uses real world learning and the outdoor classroom to spark pupils' curiosity about phenomena in the world around them and develop their scientific understanding. During the course pupils will have opportunities to develop their personal and social awareness by engaging with the concepts and processes underpinning some exciting issues in Science. Emphasis will be placed on hands-on, active and safe learning where pupils will participate in a series of outdoor learning sessions that will enable them to:

- *Research, experiment, discuss and develop arguments*
- *Pursue enquiries in a range of areas of Science*
- *Use real life examples and real locations*
- *Experience science in the outdoor environment*
- *Use creative and thinking skills*
- *Explore the importance of sustainability in science*
- *Practice and refine their practical and enquiry skills*

FSC

BRINGING
ENVIRONMENTAL
UNDERSTANDING TO ALL

Please visit

<http://www.field-studies-council.org/outdoorclassroom>

For alternative [science field trips](#)

COURSE LENGTH

3 Days (2 nights with 6 teaching sessions)

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

OR

Friday	Saturday	Sunday
Arrive for evening meal. Evening session	Morning, afternoon and evening sessions	Morning and afternoon sessions.

COURSE CONTENT

Includes:

- Orienteering / map reading
- Problem solving, team building and personal social development
- Science investigations fulfilling Statutory National Curriculum requirements on out of classroom learning and with cross-curricular links to geography, citizenship and mathematics
- Studies of diverse habitats and adaptations of organisms



External Recognition of Quality

All our centres have been awarded the Quality Badge by The Council for Learning Outside the Classroom. 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 led in campaigns to reverse the continuing decline in fieldwork within secondary schools and to build opportunities for 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.

COURSE TIMETABLE

DAY	MORNING	AFTERNOON	EVENING
1	<p>Arrival (approx. 12 - 1pm)</p> <p>Welcome and outline the week's challenges ahead</p> <p>Tour of Centre Settle into rooms Allocate kit (i.e. waterproofs)</p>	<p>Environmental Challenges</p> <p>A variety of team building activities are used to introduce the 'ingredients' of a good team and how team skills are important in Science. Pupils will take part in an orienteering activity, completing scientific challenges on and around the course to help them explore the surrounding environment. They will collect data to help them consider how the environment changes naturally and through human interaction.</p> <p><u>Schemes of Work</u> Science Unit 9G: Environmental Chemistry</p>	<p>Earth and Space</p> <p>Building on the afternoon team activities, pupils will be introduced to the Global Positioning System and its usefulness in predicting the weather. Pupils will take GPS readings from around the Centre and together with wind, temperature, humidity and light readings will build a picture of the micro-climates around the Centre.</p> <p><u>Schemes of Work</u> Science Unit 9J: Gravity and Space</p>
2	<p>Ecological Exploration</p> <p>Pupils will survey and explore a special habitat close to the Centre: habitats maybe a Rocky shore, stream, pond or moorland. Pupils will learn how to make predications, sample and collect data, present and interpret this data. Identification and classification of organisms will be covered, together with how the living things within a community influence each other and are affected by the environment.</p> <p><u>Schemes of Work:</u> Science Unit 8D: Ecological relationships</p>		<p>Fire and Friction (weather dependent)</p> <p>Pupils will try different ways of lighting a fire and use a range of materials to apply their knowledge of burning to an everyday context. They will have the opportunity to explain how different ways of lighting fire, use chemistry in different ways.</p> <p><u>Schemes of work</u> Science Unit 9H: Using Chemistry</p> <p>Animal Survey (option if wet)</p> <p>This evening will provide pupils with the opportunity to start to investigate the 'hidden' ecology of the landscape. Owl pellet dissection, small mammal surveys or microscope investigation will allow pupils to investigate the Centre habitat in depth.</p> <p><u>Schemes of Work:</u> Science Unit 8D: Ecological relationships</p>
3	<p>Woodland Investigations</p> <p>As a review and consolidation of the course pupils will select from the strategies they have developed and apply these to a series of mini investigations and questions. Pupils will have the opportunity to explore topics such as:</p> <ul style="list-style-type: none"> • How can seeds be transported • Tree canopies and height • Estimating age of woodlands <p><u>Schemes of Work</u> Science Unit 9M Investigating scientific questions</p>	<p>Depart</p>	

*Please note: to ensure safe and quality learning experiences for students the timetable may alter depending on weather conditions and local factors at centres.

EVERY CHILD MATTERS OUTCOMES WHICH THE COURSE CONTRIBUTES TO:**Be healthy:**

- Physically healthy

Enjoy and achieve:

- Achieve personal and social development and enjoy recreation
- Achieve stretching national educational standards at secondary school

Make a positive contribution:

- Engage in decision-making and support the environment
- Develop positive relationships
- Develop enterprising behaviour

NATIONAL CURRICULUM LINKS:**Science:**

- 1.1 (b) 'Critically analyzing and evaluating evidence from observations'
- 2.1 (b) 'Assess risk and work safety in the field'
- 2.1 (c) 'Plan and carry out investigative activities'
- 3.3 (d) 'All living things show variation & are interdependent, interacting with each other & their environment'
- 3.4 (a) 'Geological activity is caused by chemical and physical processes'
- 3.4 (c) 'Human activity and natural processes can lead to changes in the environment'
- 4 (e) 'Experience science outside the school environment'
- 4 (g) 'Recognise the importance of sustainability in scientific and technological developments'

Geography:

- 1.1 (a) 'Understanding the physical and human characteristics of real places'
- 1.6 (a) 'Understand that physical and human dimensions of the environment are interrelated'
- 1.6 (b) 'Explore sustainable development and its impact on environmental interaction and climate change'
- 2.3 (a) 'Use a map at a range of scales'

PE:

- 1.1 (c) 'Responding with body and mind to the demands of an activity'
- 1.4 (b) 'Recognise that physical activity has a great impact on physical, mental and social wellbeing'

Citizenship:

- 1.1 (a) 'Participating in different kinds of decision making'
- 2.2 (b) 'Taking account of different viewpoints'
- 2.3 (a) 'Explore creative approaches to taking action on problems and issues to achieve intended purposes'
- 3 (a) 'Actions that individuals and groups can take to influence decisions affecting the environment'

English:

- 1.4 (c) 'Explore other ideas and develop their own'
- 2.1 (d) 'Engage an audience using a range of techniques'

Mathematics:

- 2.1 (a) 'Identify the mathematical aspects of a situation or problem'
- 2.1 (d) 'Select mathematical information methods and tools to use'
- 2.2 (k) 'Make accurate mathematical diagrams and graphs'
- 2.3 (d) 'Look at data to find patterns and exceptions'
- 3.3(c) 'Measures of central tendency and spread'
- 4 (d) 'Work on problems that arise in other subjects and in contexts beyond the classroom'

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.

FSC CENTRES**FSC Centres that offer this course:**

BL	Blencathra	Tel: 017687 79601
CH	Castle Head	Tel: 0845 3307364
DF	Dale Fort	Tel: 0845 3307365
DG	Derrygonnelly	Tel: 028 686 41673
FM	Flatford Mill	Tel: 0845 330 7368
JH	Juniper Hall	Tel: 0845 458 3507
KD	Kindrogan	Tel: 01250 870150
MT	Malham Tarn	Tel: 01729 830 331
MA	Margam	Tel: 01639 895636
NC	Nettlecombe	Tel: 01984 640320
OR	Orielton	Tel: 0845 330 7372
PM	Preston Montford	Tel: 0845 330 7378
RC	Rhyd-y-creuau	Tel: 01690 710 494
SL	Slapton Ley	Tel: 01548 580 466

TO BOOK THIS COURSE, 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 course the minimum size of your group must be 12 students and 1 member of staff*

Please visit

<http://www.field-studies-council.org/outdoorclassroom/>

For alternative [science field trips](#)

The FSC prides itself on being flexible. The content of our recommended courses can be tailored to meet your needs. Alternatively, we can work with you to create a fully bespoke course to meet your exact requirements.

COURSE PRICES

The cost of this course is shown below. The fee varies depending on time of year, arrival and departure days/times and course content. The FSC prides itself on being flexible; the course content can be tailored to meet your needs. Alternatively, we can work with you to create a fully bespoke course to meet your exact requirements.

3 day timetable , 2012, prices from: Band A: £89 Band B: £109 Band C: £132 Band D: £150 Band E: £157
 3 day timetable , 2013, prices from: Band A: £89 Band B: £112 Band C: £135 Band D: £154 Band E: £161

Week Beginning	Band	Week Beginning	Band	Week Beginning	Band
03 September 2012	D	25 February 2013	D	19 August 2013	B
10 September 2012	D	04 March 2013	D	26 August 2013	B
17 September 2012	D	11 March 2013	D	2 September 2013	C
24 September 2012	D	18 March 2013	D	9 September 2013	D
01 October 2012	E	25 March 2013	D	16 September 2013	D
08 October 2012	E	01 April 2013	B	23 September 2013	D
15 October 2012	D	08 April 2013	B	30 September 2013	E
22 October 2012	D	15 April 2013	D	7 October 2013	E
29 October 2012	B	22 April 2013	C	14 October 2013	D
05 November 2012	D	29 April 2013	C	21 October 2013	C
12 November 2012	D	06 May 2013	C	28 October 2013	B
19 November 2012	C	13 May 2013	C	4 November 2013	D
26 November 2012	C	20 May 2013	C	11 November 2013	D
03 December 2012	A	27 May 2013	B	18 November 2013	C
10 December 2012	A	03 June 2013	D	25 November 2013	C
17 December 2012	A	10 June 2013	E	2 December 2013	A
24 December 2012	A	17 June 2013	E	9 December 2013	A
31 December 2012	A	24 June 2013	E	16 December 2013	A
07 January 2013	A	01 July 2013	E	23 December 2013	A
14 January 2013	A	08 July 2013	E	30 December 2013	A
21 January 2013	B	15 July 2013	C		
28 January 2013	C	22 July 2013	C		
04 February 2013	C	29 July 2013	A		
11 February 2013	C	5 August 2013	A		
18 February 2013	B	12 August 2013	A		

FSC courses are classed as educational by HMRC and are therefore VAT exempt; **we don't charge you VAT**. This can save you time and effort paying it and then attempting to claim it back, if you are eligible to do so.

Included within the course 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 in a ratio of 1 to 12 students
- 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 course fee.

FSC offers a number of courses covering [Science field trips](#), [biology fieldwork](#), [AS / A level biology fieldwork](#) as well as [geography field trips](#) and [geography fieldwork](#). Please visit our website for further information.