

Key Stage 4 Science Courses

Our courses are designed to meet the requirements of AQA, OCR, Edexcel & WJEC GCSE specifications.

The course can be tailored to cover parts of How Science Works including:

- Practical and enquiry skills.
- Collection of data from primary sources.
- How to work accurately and safely when collecting data.
- Evaluation of methods of data collection.
- Use of qualitative and quantitative approaches.
- Analysis of data.
- Data presentation.

Choose from the range of courses listed.

- Led by friendly and well trained tutors
- Knowledge and understanding of the natural environment
- Fieldwork skills and techniques
- Comprehensive Health and Safety procedures
- Free staff places

For more information or to make a booking contact
Epping Forest Field Centre on 020 8502 8500.

Courses cost £16 per person, subject to a minimum fee of £300 per taught group, prices are subject to change contact the Centre for up to date fees. Course content is for a day visit, typically arriving by 9.30am, leaving 3.30pm. Tailor made courses, including half day activities are available, and changes to timings can be discussed.

The Centre's purpose built facilities offer superb opportunities for field study in the heart of Epping Forest.

All of our courses are led by experienced tutors selected for their knowledge and expertise as well as their relaxed and friendly manner.

Epping Forest Field Centre

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Registered Charity Number: 313364

Managed by FSC for and on behalf of the City of London Corporation, Conservators of Epping Forest.

FSC

BRINGING
ENVIRONMENTAL
UNDERSTANDING TO ALL

Freshwater Ecology

Students will study the invertebrates in a pond and consider their adaptations, relationships and requirements, and how this relates to the distribution of invertebrates. Fieldwork includes designing their own fieldwork technique as a group and collecting data using standard dip-netting. Students will also have an opportunity to evaluate their methodology and create pyramids of numbers and biomass using the students' own data.

Woodland Ecology (NEW for 2011)

Students will compare the biotic and abiotic factors at two managed wooded sites using random sampling. Fieldwork includes site observations, designing fieldwork techniques and data collection using a range of equipment including quadrats, metre rulers, clinometers and light meters. Students will also have an opportunity to evaluate their methodology.

Classification and Biodiversity (NEW for 2011)

Students will understand what biodiversity is and the reasons for differences in biodiversity. Fieldwork includes designing techniques to compare and contrast the biodiversity in different areas/habitats, identifying species using keys and constructing a key based on observations. Students will also have the opportunity to carry out mammal trapping.

Pollution indicators (NEW for 2011)

Students will use the presence or absence of an indicator species to assess pollution levels. Fieldwork may include: site observations, abiotic measurements, identifying species of lichen on the trunk and twigs of selected trees to compare and contrast different areas in terms of air quality and studying the freshwater invertebrates found in forest ponds to assess freshwater quality.

Bugs on Bushes Available April - October

A study of the invertebrates found in stinging nettles and bracken to consider their suitability as microhabitats and how this relates to invertebrate distribution. Fieldwork includes: Considering adaptations and habitat requirements, designing fieldwork techniques as a group, collecting data using sweep nets and pooters, evaluating methodology and a follow up with pyramids of numbers and biomass using the students' own data.

Holly Leaf Miners

Students will be given the opportunity to investigate the Holly Leaf Miner lifecycle and consider the associated food webs and relationships. Fieldwork includes designing their own fieldwork technique as a group and collecting Holly leaf data. Students will also evaluate their methodology and create pyramids of numbers and biomass using their own data.

Scientific Skills

The day is designed to allow students to gain practical experience in biological skills and techniques. Students will undertake small scale fieldwork projects using a range of equipment. Fieldwork can include: site observations, local frequency measurements using quadrats, systematic sampling, random sampling and stratified sampling in grassland, woodland & freshwater habitats.

BTEC Ponds

Students will be given the opportunity to study the freshwater invertebrates found in forest ponds with particular focus on Wake Valley Pond. Adaptations will also be considered to explain possible differences in invertebrates found due to pollution. Students will collect quantitative and observational data from the field and use this data to create pyramids of numbers and biomass. It is strongly recommended that the pre and post course activities are completed as they have been designed to support the portfolio development outside of the students' visit to the Centre.

To book, or for more information call 020 8502 8500.