

SHORT COURSES IN APPLIED ECOLOGY AND SUSTAINABLE ENVIRONMENTS

Are you a practitioner looking to develop your subject knowledge and skills in these topics?

Individuals who wish to add to their CPD portfolio are invited to join short courses in these subjects:

- Geographical Information Systems: Mapping and Remote Sensing
- Environmental Assessment: EIA, SEA and Ecosystem services
- Practical Ecological Methods
- Ecological Interactions
- Environmental Pollution and Remediation
- Governance for Sustainable Environments
- Sustainable Food, Food Security and Society
- Sustainable Communities

Advanced study for professionals and practitioners

New technologies, environmental change, policy shifts, legislative change: professionals working in ecology, environmental management, planning, design and research regularly need to refresh their understanding of best practice in response to these challenges.

The University of Gloucestershire is able to offer to practitioners a limited number of places on short courses delivered at Master's level. Participants will be expected to have a degree or equivalent qualification or experience. No specific subject knowledge or skills will be assumed, but you will be challenged to learn quickly as befits an advanced course of study, working alongside students studying for an Master's courses in Applied Ecology, Sustainable Environments or Landscape Architecture.

These short courses will be particularly useful to people currently working in, or intending to move into, professions such as ecological consultancy,

conservation, environmental monitoring and management, environmental education, landscape architecture, corporate responsibility and community development. We are happy to advise on whether or not a course would be suitable for you; contact shortcourses@glos.ac.uk to discuss the courses in more detail.

If you choose to attend a course on an "attendance only" basis you will receive a Certificate of Attendance in recognition of your continuing professional development. However, if you wish, you can submit coursework for assessment to achieve credit that could count towards a postgraduate award.

All courses are delivered at the Francis Close Hall campus of the University of Gloucestershire. For directions go to www.glos.ac.uk/travel. As a registered *Associate student* of the University you will be entitled to use its resources including the library.

Workshops normally run from 9.15am to 4.15pm, with breaks for lunch and refreshments (bring your own or purchase from the campus Refectory). Some activities will be participant-led, supported by tutors but requiring individual or team work including presentations made to the rest of the group.



Geographical Information Systems: Mapping and Remote Sensing

You will acquire hands-on skills in data acquisition including GPS and the manipulation and presentation of data through mapping and GIS, while also developing the theoretical context to GIS, remote sensing and spatial data analysis. Practical GIS skills are introduced and developed using industry standard and open source software. The course examines how practitioners apply these techniques across a wide range of environmental sectors. No previous experience is required, but you will need to work on your skills development between workshop sessions.

Dates: 3, 17, 31 Oct, 14, 28 Nov, 12 Dec

Environmental Assessment: EIA, SEA and Ecosystem services

You will examine how environmental decisions are undertaken in practice, using case studies to explore different assessment processes, their legal context, and the specific methodologies that address different types of impacts. You will consider how decisions are made in different contexts within the environmental arena at levels from the local to the global. Practical work undertaken individually and in groups highlights the interdisciplinary nature of environmental assessment and makes use of the different skills brought by participants.

Dates: 30 Jan, 13, 27 Feb, 13, 27 Mar

Practical Ecological Methods

The course develops practical skills via fieldwork, laboratory work and workshop activities, underpinned by sessions on theoretical issues. You will learn how to design and implement biological surveys to collect appropriate and meaningful data. This will include consideration of sample strategy, census methods and biological indices. These principles will be applied to surveying plants, vertebrates and invertebrates using industry-standard techniques. Improving species identification and use of biological keys will be an important focus. Habitat classification and use of indicator species will also be covered, as will manipulation and analysis of field data.

Dates: 26 Sep, 10, 24 Oct, 21 Nov, 9 Jan, 6, 20 Feb, 6, 20 Mar, 1 May

Ecological Interactions

The course examines the complex interactions between species and their environments. Biotic interactions include competition, predation, parasitism, and hybridisation; abiotic interactions include habitat selection, ecosystem engineering and bioaccumulation. We use case studies to examine how interactions can be studied in the field, how interactions can be modified by human actions, how such interactions are managed within conservation, and the role of environmental and climate change in modifying such interactions

Dates: 5, 19 Feb, 5, 19 Mar, 30 Apr

Environmental Pollution and Remediation

The course examines environmental pollution challenges on land, in the air and in water and considers methods for pollution mitigation in different environments. The course will then focus upon methods currently employed by the brownfield remediation industry to tackle the most commonly

encountered types of land and groundwater pollution. Case studies take an in-depth look at specific environmental pollution issues and the applicable remediation and/or mitigation methods which could be employed in these particular instances.

Dates: 29 Jan, 12, 26 Feb, 12, 26 Mar

Governance for Sustainable Environments

The course develops understanding of the manner in which governance and policy is made and implemented within the arena of the environment and sustainable development, and evaluates the agreements, legislation and policies that have been framed. Examples include national, European and International legislation and commitments. There is a focus on understanding policy formulation, planning processes and implementation in respect of key natural and socio-cultural resources, as well as evaluating policies' effectiveness. You will investigate alternative paradigms of good governance and responsible leadership in the context of current global sustainability challenges.

Dates: 6, 7 Nov, and 5, 11 Dec

Sustainable Food, Food Security and Society

The course analyses the changing nature of food in society, with a particular emphasis on the growing significance of the notions of food security and sustainable food. You will consider key theoretical and policy developments related to the supply of food and the main factors affecting both global and local food systems. Links are also made to issues around nutrition, diet and food choices, including an examination of the notion of a "sustainable diet". The material is organised to tease out relationships along the food chain and to examine the rise of initiatives such as "alternative" and "local" food networks.

Dates: 5, 19 Mar, 16, 30 Apr

Sustainable Communities

How can communities be empowered and engaged so that they are more resilient and self-aware? What is the relationship between the concept of "sustainability" and ideas of "citizenship", "community", and "social inclusion"? The course evaluates the processes and methods of intervention within and between local communities and the wider world, and the roles of different actors and organisations including voluntary groups, social movements, not-for-profit businesses and EU initiatives such as LEADER.

Dates: 6, 20 March, 17 Apr, 1 May

To apply

Please go to www.glos.ac.uk/shortcourses.

The fee for each course is £450. Some courses include local fieldwork and you will need to make your own way to the site or contribute to the cost of transportation organised by the University. You will need suitable clothing and personal equipment for carrying out any work in the field. Specialist equipment is supplied by the University.