

LF257-15 Ecology and its Applications

26/27

Department

Life Sciences

Level

Undergraduate Level 2

Module leader

Charlotte Allender

Credit value

15

Module duration

5 weeks

Assessment

Multiple

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module gives second year students the opportunity to gain a broad perspective of ecosystems and responses by habitats and species to disturbances caused by a variety of factors. Several major environmental issues are presented along with possible solutions to some of them, using concepts learned through case studies from across the world.

Module aims

Students will learn about the importance of ecosystem structure and function and the impacts of human activities. They will gain an understanding of: environmental resources, drivers of biodiversity loss, pollution, environmental degradation and global change, including the role of human populations. They will explore a range of methods for natural resource measurement and conservation, including the use of protected areas, economic aspects of environmental practice and approaches to environmental problem-solving.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Using case studies we will cover topics such as:

An introduction to the application of ecological approaches to environmental issues

Impacts on ecosystem services and drivers of biodiversity loss

Conflicts and different approaches to supporting ecosystem service delivery

Learning outcomes

By the end of the module, students should be able to:

- Understand of key mechanisms by which humans can impact ecosystem structure and function, demonstrated through reference to relevant examples
- Understand how specific biological traits of organisms can influence their ability to support or disrupt ecosystem services, structure or function
- Evaluate different methods for the assessment of environmental impacts, including current research techniques used in industry and academic research
- Understand the benefits of an interdisciplinary approach to understanding human impacts on the environment

Indicative reading list

[Reading lists can be found in Talis](#)

Subject specific skills

Understand key mechanisms by which humans can impact ecosystem structure and function, demonstrated through reference to relevant examples

Demonstrate how specific biological traits of organisms can influence their ability to support or disrupt ecosystem services, structure or function

Evaluate different methods for the assessment of environmental impacts

Describe the benefits of an interdisciplinary approach to understanding human impacts on the environment

Transferable skills

Self Directed Learning

Adult Learning

Study

Study time

Type	Required
Lectures	12 sessions of 1 hour (8%)
Seminars	3 sessions of 1 hour (2%)
Other activity	10 hours (7%)
Private study	94 hours (63%)
Assessment	31 hours (21%)
Total	150 hours

Private study description

Self-directed learning and revision

Other activity description

Authentic assessment, based on a common problem or dataset researchers would deal with on a regular basis in the academic environment. This is in-line with both AQSC and RSB requirements on assessments

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

Assessment group D2

	Weighting	Study time	Eligible for self-certification
In-class assignment	30%	30 hours	Yes (extension)
Authentic assessment, based on a common problem or dataset researchers would deal with on a regular basis in the academic environment. This is in-line with both AQSC and RSB requirements on assessments			
Closed-book end-of-year examination	70%	1 hour	No
In-person locally-timetabled closed-book end-of-year examination			

Assessment group R2

	Weighting	Study time	Eligible for self-certification
Closed-book examination	100%		No
In-person locally-timetabled closed-book end-of-year examination			

Feedback on assessment

Feedback will be provided to students on submitted examination answers in line with the policy of the School of Life Sciences: currently to provide students with cohort level guidance highlighting characteristics of highly scoring vs poorly scoring essays.

[Past exam papers for LF257](#)

Availability

Courses

This module is Core for:

- Year 2 of UIPA-C1L8 Undergraduate Life Sciences and Global Sustainable Development

This module is Core optional for:

- Year 2 of UIPA-C1L8 Undergraduate Life Sciences and Global Sustainable Development

This module is Optional for:

- Year 2 of UBSA-C700 Undergraduate Biochemistry
- ULFA-C1A2 Undergraduate Biochemistry (MBio)
 - Year 2 of C1A2 Biochemistry
 - Year 2 of C700 Biochemistry
- Year 2 of ULFA-C702 Undergraduate Biochemistry (with Placement Year)
- Year 2 of ULFA-C1A6 Undergraduate Biochemistry with Industrial Placement (MBio)
- Year 2 of UBSA-3 Undergraduate Biological Sciences
- Year 2 of ULFA-C1A1 Undergraduate Biological Sciences (MBio)
- Year 2 of ULFA-C113 Undergraduate Biological Sciences (with Placement Year)
- Year 2 of ULFA-C1A5 Undergraduate Biological Sciences with Industrial Placement (MBio)
- Year 2 of UMDA-CF10 Undergraduate Integrated Natural Sciences (MSci)