

# EC138-15 Introduction to Environmental Economics

**24/25**

**Department**

Economics

**Level**

Undergraduate Level 1

**Module leader**

Andreas Markoulakis

**Credit value**

15

**Module duration**

10 weeks

**Assessment**

Multiple

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

Environmental economics studies how economic activity and policy may affect the environment in which we live. This course provides students with theoretical and methodological tools that allow them to apply principles of economics to study how natural resources are (or should be) evaluated and managed. Contemporary environmental problems, such as climate change, sustainable development and transboundary pollution are discussed in light of the concepts introduced in the first part of the course.

[Module web page](#)

### Module aims

To provide students with theoretical and methodological tools that allow them to apply principles of economics to study how natural resources are (or should be) evaluated and managed.

### 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.

The core topics in the syllabus will typically include:

1. Introduction to the key concepts from environmental economics: markets; market failures; government regulation; Cost Benefit Analysis; the environment as a social asset
2. Strategic interactions: Coase Theorem; Tragedy of the Commons; Transactions costs and institutions
3. Valuing the environment: Welfare economics; efficiency and optimality in allocation; approaches to environmental evaluation; environmental ethics; sustainable development
4. Environmental policy instruments and implementation: common and control policies in different areas e.g. water; policy design and implementation; biodiversity; trade
5. Applications: deforestation; tropical deforestation and poverty; preservation and conservation; climate change; carbon trading; international co-operation; Kyoto Protocol

## Learning outcomes

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

- Subject-Specific/Professional Skills:...demonstrate an ability to research relevant topics, including using the library and internet as information sources. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief and presentation.
- Subject knowledge and understanding:...demonstrate knowledge of the main tools used to value environmental goods and services The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief, presentation and final exam.
- Subject knowledge and understanding:...use economic arguments to discuss environmental policy proposals. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief, presentation and final exam.
- Subject-Specific/Professional Skills:...communicate their knowledge and understanding to others, verbally and in writing. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief, presentation and final exam.
- Subject-Specific/Professional Skills:...review the literature within environmental economics and be able to apply it accordingly. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief and presentation.
- Subject-Specific/Professional Skills:...understand the interdisciplinary nature of environmental economics. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy

brief, presentation and final exam.

- Cognitive Skills:...demonstrate an understanding of the importance of critical thinking and problem solving when approaching environmental problems. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief, presentation and final exam.
- Cognitive Skills:...think creatively to develop policy solutions for the environment. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief and presentation.
- Subject knowledge and understanding:... apply fundamental concepts such as market failure, household behaviour, transaction costs and willingness to pay to the study of environmental economics. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief, presentation and final exam.
- Subject knowledge and understanding:...understand key concepts used by environmental economists and political scientists and how they can be applied to policy. The teaching and learning methods that enable students to achieve this learning outcome are: Lectures, reading and independent study. The summative assessment methods that measure the achievement of this learning outcome are: policy brief and presentation.

## **Indicative reading list**

Please see Talis Aspire link for most up to date list.

[View reading list on Talis Aspire](#)

## **Subject specific skills**

Students will have the opportunity to develop skills in:

Analytical thinking and communication

Analytical reasoning

Critical thinking

Creative thinking

Strategic thinking

Problem-solving

Abstraction

Policy evaluation

Analysis of institutions

Analysis of incentives

## **Transferable skills**

Students will have the opportunity to develop:

Research skills

Numeracy and quantitative skills

Data-based skills  
IT skills  
Written communication skills  
Oral communication skills  
Team work skills  
Mathematical, statistical and data-based research skills

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## Study

### Study time

Type	Required
Lectures	20 sessions of 1 hour (13%)
Seminars	4 sessions of 1 hour (3%)
Other activity	2 hours (1%)
Private study	126 hours (83%)
Total	152 hours

### Private study description

Private study will be required in order to prepare for seminars/classes, to review lecture notes, to prepare for forthcoming assessments, tests, and exams, and to undertake wider reading around the subject.

### Other activity description

Two 1-hour workshops to provide students with support for their preparation for the policy brief assessment.

### Costs

No further costs have been identified for this module.

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## Assessment

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

### Assessment group C2

	Weighting	Study time
Policy brief	40%	

	<b>Weighting</b>	<b>Study time</b>
Policy brief: 2000 words excluding reference, including footnotes		
Group Presentation	10%	
Group Presentation worth 10%		
Online Examination	50%	
A paper which examines the course content and ensures learning outcomes are achieved.		
~Platforms - AEP		

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- Online examination: No Answerbook required
- Students may use a calculator

## **Assessment group R2**

	<b>Weighting</b>	<b>Study time</b>
Online Examination - Resit	100%	
A paper which examines the course content and ensures learning outcomes are achieved.		
~Platforms - AEP		

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- Online examination: No Answerbook required
- Students may use a calculator

## **Feedback on assessment**

The Department of Economics is committed to providing high quality and timely feedback to students on their assessed work, to enable them to review and continuously improve their work. We are dedicated to ensuring feedback is returned to students within 20 University working days of their assessment deadline. Feedback for assignments is returned either on a standardised assessment feedback cover sheet which gives information both by tick boxes and by free comments or via free text comments on tabula, together with the annotated assignment. For tests and problem sets, students receive solutions as an important form of feedback and their marked assignment, with a breakdown of marks and comments by question and sub-question. Students are informed how to access their feedback, either by collecting from the Undergraduate Office or via tabula. Module leaders often provide generic feedback for the cohort outlining what was done well, less well, and what was expected on the assignment and any other common themes. This feedback also includes a cumulative distribution function with summary statistics so students can review their performance in relation to the cohort. This feedback is in addition to the individual-specific feedback on assessment performance.

[Past exam papers for EC138](#)

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## Availability

### Courses

This module is Core optional for:

- Year 1 of UIPA-L1L8 Undergraduate Economic Studies and Global Sustainable Development

This module is Optional for:

- UECA-3 Undergraduate Economics 3 Year Variants
  - Year 1 of L100 Economics
  - Year 1 of L100 Economics
  - Year 1 of L100 Economics
  - Year 1 of L116 Economics and Industrial Organization
  - Year 1 of L116 Economics and Industrial Organization
- UECA-LM1D Undergraduate Economics, Politics and International Studies
  - Year 1 of LM1D Economics, Politics and International Studies
  - Year 1 of LM1D Economics, Politics and International Studies
- Year 1 of UPHA-L1CA Undergraduate Economics, Psychology and Philosophy
- UPHA-V7ML Undergraduate Philosophy, Politics and Economics
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)

This module is Unusual option for:

- Year 1 of UPHA-L1CA Undergraduate Economics, Psychology and Philosophy
- UPHA-V7ML Undergraduate Philosophy, Politics and Economics
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)

This module is Option list A for:

- Year 1 of UIPA-L1L8 Undergraduate Economic Studies and Global Sustainable Development
- UPHA-V7ML Undergraduate Philosophy, Politics and Economics
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)
  - Year 1 of V7ML Philosophy, Politics and Economics (Tripartite)