

EC996-15 Environmental Economics & Sustainable Development

26/27

Department

Economics

Level

Taught Postgraduate Level

Module leader

Anant Sudarshan

Credit value

15

Module duration

9 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module will provide a brief introduction to the meaning and scope of environmental economics. It will then outline key theoretical and methodological tools to study how to evaluate and manage natural resources. Key policy instruments to deal with contemporary environmental problems, such as climate change, sustainable development and pollution will be discussed offering an overview of the behavioural responses to environmental conservation and protection. The module will finally look at the linkage between environmental health and (in)justice to outline policy instruments and cutting-edge research that work towards improved justice and sustainability in the environmental health arena.

Module aims

To provide explanations of market failure in the environmental realm, understand why some solutions to environmental problems may work better than others, learn how to evaluate environmental resources, and appreciate how environmental issues affect our economy (e.g., economic growth, market instability, stagnation and investments), and health.

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 syllabus may cover, but is not limited to, the following topics: first and second welfare theorems, main market failures in environmental economics; Coase theorem and main Government interventions (e.g., command & control instruments vs. price-based policies); Weitzman quality/quantity controls, with an application to carbon taxes vs carbon market; valuation of environmental policies/amenities (e.g., revealed preferences vs. stated preferences); macroeconomic trends (e.g., the effect of extreme risky events on the financial market); environmental health and pollution damages; pollution and the business cycle; the socioeconomic determinants of health model; environmental justice and residential sorting; defensive investments and adaptive behaviour; environmental gentrification; economics of climate change; and the role of behavioural economics in energy efficiency gaps.

Learning outcomes

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

- Subject knowledge and understanding: Acquire knowledge on how environmental issues affect our economy and health.
- Subject knowledge and understanding: Demonstrate knowledge of methods and tools used to value environmental resources.
- Subject knowledge and understanding: Demonstrate knowledge and understanding of economic arguments to discuss environmental policy proposals and solutions.
- Subject knowledge and understanding: Understand the interdisciplinary nature of environmental economics.
- Subject-Specific/Professional Skills: Demonstrate research skills, including using the library and internet as information sources.
- Subject-Specific/Professional Skills: Communicate knowledge and understanding of key theories, methodological tools and empirical analyses in environmental economics, both verbally and in writing.
- Cognitive Skills: Demonstrate critical thinking and problem solving when approaching environmental problems.
- Cognitive Skills: Demonstrate creativity to develop policy solutions for environmental problems.

Indicative reading list

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

Subject specific skills

Applied Economics
Economic Information

Economic Principles
Research and Debate
Abstraction
Analysis of Incentives
Analysis of Institutions
Analytical Reasoning
Analytical thinking and communication
Creative Thinking
Critical Thinking
Policy Evaluation
Problem Solving
Strategic Thinking

Transferable skills

Data-based skills
IT skills
Numeracy and Quantitative Skills
Information Technology
Mathematical, statistical, data-based research skills
Oral Communication
Team Work Skills
Written Communication
Coding Skills (R, Stata, and Python)

Study

Study time

Type	Required
Lectures	18 sessions of 1 hour (12%)
Seminars	4 sessions of 1 hour (3%)
Private study	128 hours (85%)
Total	150 hours

Private study description

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

Costs

No further costs have been identified for this module.

Assessment

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

Assessment group A2

	Weighting	Study time	Eligible for self-certification
Assessment component			
Group Presentation	10%		No
Reassessment component is the same			
Assessment component			
Group Policy Brief	50%		No
Reassessment component is the same			
Assessment component			
Individual Written Critiques	10%		No
Reassessment component is the same			
Assessment component			
Data Assignment	30%		No
Reassessment component is the same			

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 Department of Economics Postgraduate 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.

Availability

Pre-requisites

The module is accessible to anyone with a good undergraduate background in economics, including intermediate microeconomics.

Courses

This module is Optional for:

- Year 1 of TECA-L1P6 Postgraduate Taught Economics
- Year 1 of TECA-L1P7 Postgraduate Taught Economics and International Financial Economics