Foundations of Ecological Economics 2015 - 2016

Code: 42407
ECTS Credits: 9

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<tr>
<th>Degree</th>
<th>Type</th>
<th>Year</th>
<th>Semester</th>
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<tr>
<td>4313784 Interdisciplinary Studies in Environmental, Economic and Social Sustainability</td>
<td>OT</td>
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<td>1</td>
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Contact

Name: Esteve Corbera Elizalde
Email: Esteve.Corbera@uab.cat

Teachers

Pere Riera Micaló
Jeroen Van Den Bergh

Use of languages

Principal working language: English (eng)

Prerequisites

If not native English speaker: valid IELTS (with a minimum score of 6.5) or TOEFL (minimum 550 paper based, 213 computer based, 79 web-based) score report or a Cambridge Certificate of Proficiency in English or Cambridge Certificate in Advanced English. Students should preferably hold an undergraduate degree with relevance to environmental or ecological economics, although students taught in geography, ecology, political science are also welcome and should in principle be able to follow the course.

Objectives and Contextualisation

The course will introduce the field of ecological economics, paying attention to theoretical, methodological and empirical issues. Classic themes, important debates and recent research foci will receive attention.

At the end of the course the student is expected to have a good understanding of:

- The main themes, theories and methods addressed by ecological economics;
- The basic literature regarding ecological economics;
- The essential differences between the way environmental problems and solutions are approached in environmental economics and ecological economics;
- New methods that have been proposed by, and are applied within, ecological economics.

Skills

- Apply knowledge of environmental and ecological economics to the analysis and interpretation of environmental problem areas.
- Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- Communicate orally and in writing in English.
- Continue the learning process, to a large extent autonomously.
- Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
- Seek out information in the scientific literature using appropriate channels, and use this information to formulate and contextualise research in environmental sciences.
Work in an international, multidisciplinary context.

Learning outcomes

1. Adopt a holistic perspective on the relationship between the economy and biophysical systems.
2. Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
3. Communicate orally and in writing in English.
4. Continue the learning process, to a large extent autonomously.
5. Differentiate between the approaches to environmental problems of environmental and ecological economics.
6. Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
7. Know the role of the institutions in environmental governance.
8. Seek out information in the scientific literature using appropriate channels, and use this information to formulate and contextualise research in environmental sciences.
9. Work in an international, multidisciplinary context.

Content

The FEE course involves a series of 3-hour lectures organised in four main sub-modules under the responsibility of specific teachers. Some lectures may involve video-discussions and role-play exercises.

Sub-Module 1: Foundations, Policy & Innovation (JvdB)

- History and principles of ecological economics (20th Oct)
- Welfare, markets, externalities and public goods (22nd Oct)
- Environmental policy instruments (27th Oct)
- Theories and methods of environmental valuation (29th Oct)
- Economics of climate policy (3rd Nov)
- The ecological footprint and spatial sustainability (5th Nov)
- Behavioural economics and environmental policy (10th Nov)

Sub-Module 2: Valuation (PR)

- Social cost-benefit and multi-criteria analysis (12th Nov)
- Revealed preference valuation methods (17th Nov)
- Stated preference valuation methods (19th Nov)

Essay writing and Reading session - with EC (24th Nov)

Sub-Module 3: Institutional Aspects (EC)

- Institutional economics and environmental governance (26th Nov)
- Property and access theory (1st Dec)
- Institutional fit, interplay and scale (3rd Dec)

Sub-Module 4: Ecosystem Services Issues, Policies and Challenges (EC)

- Commodification of ecosystem services (10th Dec)
- Payments for ecosystem services and environmental offsets (11th Dec)
- REDD+ (15th Dec)
- The environment-versus-growth debate (17th Dec)

Methodology
Lecturers will present a given topic and students will be expected to prepare for the class reading in advance, and at least, the compulsory readings suggested in the bibliography. Lectures will involve time for questions and answers and for discussion; they might also involve role-play exercises and video-material. Presentation and essays preparation will involve group and individual work, respectively.

### Activities

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<th>Type: Directed</th>
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<tbody>
<tr>
<td>Lectures</td>
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<td>Presentation and discussion in class</td>
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<th>Type: Autonomous</th>
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<tr>
<td>Reading articles, books and studying for each of the given lectures and the final exam</td>
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<tr>
<td>1 short and 2 longer essays, which involve reading the necessary literature to write the essays</td>
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### Evaluation

Students will be assessed on the basis of (a) a written, closed-book exam; b) written essays, and c) their participation in class. In particular, they will be assessed based on:

- Presence and participation in lectures: at least 75-80% of all lectures; absence should be justified.

- A final exam, contributing to 50% of the final mark. The exam will take place on the 12th January 2015, from 10 to 13:00 hours. It will cover aspects of each module of the course. Students will have limited space to answer each of these questions and will have to show that they have understood and mastered key concepts and ideas introduced during the course. The contributing teachers will evaluate the exam together.

- Three written essays:

  Essay 1) A 1000-words essay: "Use evidence from the peer-reviewed and grey literature to explain why carbon markets have either contributed or failed to reduce greenhouse gas emissions, and what could be done to improve their contribution to combatting climate change", to be submitted by 3rd December 2015, and contributing to 15% of the final mark;

  Essay 2) A 1500-words essay: Discuss the following statement: "REDD+ national strategies and projects have potential to realise environmental justice at global, national and local scale", to be submitted by 12th January 2016, and contributing to 25% of the final mark;

  Essay 3) A 500-words personal statement corresponding to the last lecture of the course, focused on the environment-versus-growth debate, and to be submitted by 17th December, contributing to 10% of the final mark.

### Evaluation activities

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<tr>
<th>Title</th>
<th>Weighting</th>
<th>Hours</th>
<th>ECTS</th>
<th>Learning outcomes</th>
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<tr>
<td>Final exam</td>
<td>50%</td>
<td>3</td>
<td>0.12</td>
<td>8, 3, 2, 6, 4, 9</td>
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Bibliography

The literature marked with (*) is compulsory and must be read prior to each lecture since it will be the basis for the respective class and ensuing discussion. The other literature mentioned is background reading that students are encouraged to read and prepare for the exam. The student should source all articles through the website and academic library sources (e.g. Scopus, Web of Knowledge), all available on the UAB campus.

1. History and principles of Ecological Economics (20th Oct)


2. Welfare, markets, externalities and public goods (22nd Oct)

(*) Kahn, J.R. 2004. The Economic Approach to Environmental and Natural Resources. 3rd edition, Thomson/South-Western, Fort Worth, Mason, Ohio. ch. 2; & ch. 4, section "What is Value".


3. Environmental policy instruments (27th Oct)


4. Theories and methods of environmental valuation (29th Oct)

(*) Perman et al., Valuing the Environment, Chapter 4 in Natural Resource and Environmental Economics


5. Economics of climate policy (3rd Nov)


Responses to / debate on the Stern review (http://www.hm-treasury.gov.uk/6520.htm).

Closing conference by invited speaker / speSESS YOUR SUB-MODULE.S, AND A MAXIMUM OF 10. MARK WITH A DOUBLE ** THOSE THAT YOU CO

6. The ecological footprint and spatial sustainability (5th Nov)


with response by Wackernagel in the journal and on the web, and replies by van den Bergh/Grazi in same journal and journal *Ecological Indicators* (2015).


7. Behavioral economics and environmental policy (10th Nov)


8. Social cost-benefit and multi-criteria analysis (12th Nov)


9. Revealed preference valuation methods (17th Nov)


(*) Riera, Pere and Giovanni Signorello (eds.) (2012) Good practice guidelines for the non-market valuation of forest goods and services. University of Catania, Catania, Italy: DiGeSA.


10. Stated preference valuation methods (19th Nov)


(*) Riera, Pere and Giovanni Signorello (eds.) (2012) Good practice guidelines for the non-market valuation of forest goods and services. University of Catania, Catania, Italy: DiGeSA.


11. Essay writing & Reading class (24th Nov)
This lecture will be dedicated to learn about essay/scientific article writing and to start planning the contents of the first 1000-words essay of the course.

12. Institutional economics and environmental governance (26th Nov)


13. Property and Access Theory (1st Dec)


14. Institutions: design, fit, interplay and scale (3rd Dec)


15. Commodity of ecosystem services (10th Dec)


Marx, K. The commodity. In: Capital, Chapter 1. Read specially sections 1 (The Two Factors of the Commodity) and 4 (The Fetishism of the Commodity and Its Secret).


16. Payments for Ecosystem Services (11th Dec)


Pattanayak, S., Wunder, S. & Ferraro, P., 2010 Show me the money: do payments supply environmental services in developing countries? Rev. Env. Econ. Pol. 4: 254-274.


17. REDD+ and environmental offsets (15th Dec)


18. The environment-versus-growth debate (17th Dec)


