

**Fonaments d'Economia Ecològica****2013/2014**

Codi: 42407

Crèdits: 9

Titulació	Tipus	Curs	Semestre
4313784 Estudis Interdisciplinaris en Sostenibilitat Ambiental, Econòmica i Social	OT	0	1

**Professor de contacte**

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**Utilització d'idiomes**

Llengua vehicular majoritària: anglès (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.

The 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.

**Objectius**

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.

**Competències**

Estudis Interdisciplinaris en Sostenibilitat Ambiental, Econòmica i Social

- Aplicar els coneixements d'economia ambiental i ecològica a l'anàlisi i a la interpretació de problemàtiques ambientals.
- Buscar informació en la literatura científica fent servir els canals apropiats i integrar aquesta informació per plantejar projectes de recerca en ciències ambientals.
- Comunicar oralment i per escrit en anglès
- Que els estudiants siguin capaços d'integrar coneixements i enfrontar-se a la complexitat de formular judicis a partir d'una informació que, tot i ser incompleta o limitada, inclogui reflexions sobre les responsabilitats socials i ètiques vinculades a l'aplicació dels seus coneixements i judicis
- Que els estudiants sàpiguen comunicar les seves conclusions, així com els coneixements i les raons últimes que les fonamenten, a públics especialitzats i no especialitzats d'una manera clara i sense ambigüïtats
- Que els estudiants tinguin les habilitats d'aprenentatge que els permetin continuar estudiant, en gran manera, amb treball autònom a autodirigit
- Treballar en un context internacional i multidisciplinari

## Resultats d'aprenentatge

1. Buscar informació en la literatura científica fent servir els canals apropiats i integrar aquesta informació per plantejar projectes de recerca en ciències ambientals.
2. Comunicar oralment i per escrit en anglès
3. Conèixer el paper de les institucions en la governança ambiental.
4. Demostrar una visió integrada de la relació entre l'economia i els sistemes biofísics.
5. Diferenciar lacostament als problemes ambientals per part de l'economia ambiental i ecològica.
6. Que els estudiants siguin capaços d'integrar coneixements i enfrontar-se a la complexitat de formular judicis a partir d'una informació que, tot i ser incompleta o limitada, inclogui reflexions sobre les responsabilitats socials i ètiques vinculades a l'aplicació dels seus coneixements i judicis
7. Que els estudiants sàpiguen comunicar les seves conclusions, així com els coneixements i les raons últimes que les fonamenten, a públics especialitzats i no especialitzats d'una manera clara i sense ambigüïtats
8. Que els estudiants tinguin les habilitats d'aprenentatge que els permetin continuar estudiant, en gran manera, amb treball autònom a autodirigit
9. Treballar en un context internacional i multidisciplinari

## Continguts

The course involves a series of lectures organised in four main sub-modules with the correspondent 3-hour lectures:

Sub-Module 1: Foundations, Policy & Innovation

1. Introduction: history and principles of Ecological Economics
2. Welfare, markets, externalities and public goods
3. Theories and methods in the valuation of the environment
4. Assessment of environmental policy instruments
5. Economics of climate policy
6. The environment-growth debate

Sub-Module 2: Societal Metabolism

7. Complexity and Thermodynamics
8. Metabolism: key concepts and methods
9. MuSIASEM

Sub-Module 3: Institutional Aspects

10. Institutional economics and environmental governance
11. Property and Access Theory
12. Institutional Fit, Interplay and Scale
13. Managing natural resources: Fishbanks I
14. Managing natural resources: Fishbanks II

Sub-Module 4: Assessment of Ecosystem Services

15. Integrated assessment of ecosystem services
16. Commodification of ecosystem services
17. Payments for Ecosystem Services
18. Environmental Offsets: REDD+, No-Net Loss Policies

## Metodologia

Lecturers will present the topic in question and leave time for questions and discussion. Some lectures will involve a group or individual writing exercise, or they will involve the discussion of provided articles. In this regard, students must have read the compulsory readings suggested in section 8 below.

## Activitats formatives

Títol	Hores	ECTS	d'aprenentatge
Tipus: Dirigides			
Exercise in class	6	0,24	4, 9
Lectures	48	1,92	3, 5, 6
Tipus: Autònomes			
4 short- and long-essay writing, which involves reading the necessary literature to write the essays	60	2,4	1, 2, 4, 6, 7, 8
Reading articles, books and studying for each of the given lectures	108	4,32	1, 3, 5, 8

## Avaluació

Students will be assessed on the basis of a) the knowledge they have gained throughout the course regarding the fundamentals of ecological economics and the different aspects reviewed in class; b) their writing and critical thinking abilities, and c) their participation in class. In particular, they will be assessed based on:

- A final exam that will contribute toward 50% of the final mark. It will last 2.5 hours and cover most aspects of the course in 10 questions. Students will have limited space to answer each of these questions and will have to prove that they have understood and master key concepts and ideas introduced during the course. The four contributing teachers will evaluate the exam, and each question will be marked between 0 and 1 point. Students will have the right to discuss the essay and the mark with the correspondent teacher and may complain to the MSc coordinator if unsatisfied with the final outcome.
- Four written essays, including a) two 500-words essays corresponding to sub-modules 1 and 3, respectively, and b) two 1000-words essays corresponding to sub-modules 2 and 4. The short essays will contribute toward 5% of the mark each (i.e. 10% in total), whilst the long essays will contribute toward 15% of the final mark each (i.e. 30% in total). The correspondent teacher will assess the essay following his own marking criteria, with marks falling between 0 (for very bad) and 10 points (for very good essays). Students will have the right to discuss the essay and the mark with the correspondent teacher and may complain to the MSc coordinator if unsatisfied with the final outcome.
- An exercise in class and its correspondent assessment as part of sub-module 3 will contribute toward 10% of the final mark. Students will have the right to discuss the essay and the mark with the correspondent teacher and may complain to the MSc coordinator if unsatisfied with the final outcome.
- Each student will have to qualify in each of the evaluation exercises above and can only skip doing one or more of such exercises if this is adequately justified. An student who fails to pass as a result of a poor exam may be given an opportunity to re-take it before the final overall mark is officially delivered to UAB, but only if she/he has shown proof of progressive learning in the other evaluation exercises.

## Activitats d'avaluació

Títol	Pes	Hores	ECTS	Resultats d'aprenentatge
4 short- and long-essay writings	40%	0	0	1, 2, 4, 6, 7, 8
Exercise in class	10%	0	0	9
Final exam	50%	3	0,12	2, 3, 4, 5, 6, 7, 8

## Bibliografia

The references provided below are indicative and the student is encouraged to search for more articles and books under each topic. However, the articles marked (\*\*\*) must be read prior to each lecture as they will be

discussed or used in class.

### 1. Introduction: History and principles of Ecological Economics

(\*\*) van den Bergh, J.C.J.M. 2000. Ecological Economics: Themes, Approaches, and Differences with Environmental Economics. *Regional Environmental Change*, 3(1): 13-23.

Martinez-Alier, J., Roca Jusmet, J. 2000. Economía Ecológica y Política Ambiental. PNUMA y Fondo de Cultura Económica.

Ropke, I. 2005. Trends in the development of ecological economics from the late 1980s to the early 2000s. *Ecological Economics*, 55: 262- 290.

### 2. Welfare, markets, externalities and public goods

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(\*\*) Martinez-Alier, J., Munda, J., O'Neill, J. 1998. Weak comparability of values as a foundation for ecological economics. *Ecological Economics*, 26: 277-286.

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## 5. Economics of climate policy

(\*\*) Executive summary of The Stern review: *The Economics of Climate Change* (2006).

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