

**Environmental Economic Policies**

Code: 105025  
ECTS Credits: 3

Degree	Type	Year	Semester
2501915 Environmental Sciences	OT	4	0

**Contact**

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**Use of Languages**

Principal working language: spanish (spa)  
Some groups entirely in English: No  
Some groups entirely in Catalan: No  
Some groups entirely in Spanish: Yes

**Prerequisites**

There are no prerequisites.

**Objectives and Contextualisation**

The subject contributes to improve the critical understanding of the different objectives and instruments of environmental policy. It aims to make available the tools to evaluate and guide the design of policies to achieve the environmental, social and economic objectives. The subject contributes to provide skills for environmental consultancy, as well as for the management of resources and waste.

In short, the objectives of the subject can be summarized as follows:

- To review the economic analysis of the main environmental problems, as well as the main instruments to solve them.
- To understand the relationship between the economic, social and ecological systems, and how they are affected by the different environmental policy tools.
- To study the pros and cons of the different instruments of environmental policy and the possibility to apply them to the different environmental problems.
- To know the different tools for the evaluation of environmental policies.
- To analyze critically the literature on environmental policies, commenting and discussing a series of seminal readings.
- To review the main current debates in the field of environmental policies, and, in particular, on the policies applied in some of the main ecological problems, such as climate change, and the possible alternatives.

**Competences**

- Adequately convey information verbally, written and graphic, including the use of new communication and information technologies.
- Analyze and use information critically.
- Collect, analyze and represent data and observations, both qualitative and quantitative, using secure adequate classroom, field and laboratory techniques
- Demonstrate adequate knowledge and use the tools and concepts of the most relevant social science environment.
- Demonstrate concern for quality and praxis.
- Demonstrate initiative and adapt to new situations and problems.
- Teaming developing personal values regarding social skills and teamwork.
- Work autonomously

## Learning Outcomes

1. Adequately convey information verbally, written and graphic, including the use of new communication and information technologies.
2. Analyze and use information critically.
3. Apply the methods of integrated assessment of alternatives presented in the course.
4. Critically analyze basic environmental science literature in Catalan, Castilian and English.
5. Demonstrate concern for quality and praxis.
6. Demonstrate initiative and adapt to new situations and problems.
7. Identify and analyze the different instruments of environmental policy, and quantitative limits, environmental taxes or trading systems of resource use rights.
8. Observe, recognize, analyze, measure and adequately represent economic processes applied to environmental sciences.
9. Teaming developing personal values regarding social skills and teamwork.
10. Work autonomously

## Content

1. Environmental problems and the economy.
1. Markets operation and environmental degradation: the justifications for public sector intervention and environmental policies.
1. Different conceptions of sustainability and their applications.
1. The economic appraisal of environmental policies.
1. Future generations in policy appraisal. Ethics, ecological economics, and environmental policy.
1. Environmental policy tools: environmental taxes.
1. Environmental policy tools: tradable permits, deposits and others.
1. The relationship between economic growth, environmental quality, and environmental policies.
1. Global environmental problems: Economics of climate change and mitigation policies.

## Methodology

The subject is divided in theoretical and practical sessions.

In the theoretical sessions the teacher will explain the contents of the course in lectures. The materials used in class (powerpoints) will be available for students in the Virtual class of the subject. These materials only summarize the contents discussed in class.

In the practical sessions various readings will be discussed and there will also be exercises. In some practices the students will expose their synthesis and critical commentary of the reading, and there will be a discussion and debate in class on the subject, in others there will be exercises or quizzes in class.

The different materials of the subject (slides, compulsory readings, complementary readings, schedule of essays, grades, etc.) will be available in the Virtual class of the subject.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Practical classes	7	0.28	4, 2, 3, 6, 5, 7, 8, 1, 10, 9
Theoretical classes	13	0.52	4, 2, 3, 7, 8
Type: Supervised			
Supervision of the preparation of the practices	11	0.44	4, 2, 3, 6, 5, 7, 8, 1, 10, 9
Tutorials	4.5	0.18	4, 2, 3, 6, 5, 7, 8, 1, 10, 9
Type: Autonomous			
Studying, readings and preparation of the essays	33	1.32	4, 2, 3, 6, 5, 7, 8, 1, 10, 9

## Assessment

The assessment will be based on a series of essays, exercises in class and a final exam. The weight of the exam in the final grade will be 30% and the weight of each of the 3 essays will be 20% and the weight of the exercises in class 10%. The student has to deliver a minimum of 3 essays out of 5. If she/he delivers more, her/his grade will improve.

The essays will consist of the synthesis and critical commentary of the readings proposed by the teacher. The essays must be delivered on the indicated dates. At the beginning of the course, the teacher will give a schedule with the deadlines to deliver the different essays. The teacher will provide the readings for the essays, in addition to the recommended complementary readings, in the Virtual Campus.

The date of the exam is the one indicated by the Faculty in its exam calendar. The teacher will indicate the date and place for the revision of the qualifications the day of the exam.

In case the student fails to pass the subject, she/he can participate in the recovery process. This will consist of the delivery of the essays failed or not submitted and in a recovery exam. To participate in the recovery, the students must have been previously evaluated in a set of activities whose weight is equivalent to at least two thirds of the total grade of the subject.

Only those students who have not participated in any evaluation activity will be qualified with a "non-evaluable".

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Class exercises	10%	1.5	0.06	4, 2, 3, 6, 5, 7, 8, 1, 10, 9
Essay 1 (summary and critical commentary of a reading)	20%	1	0.04	4, 2, 3, 6, 5, 7, 8, 1, 10

Essay 2 (summary and critical commentary of a reading)	20%	1	0.04	4, 2, 3, 6, 5, 7, 8, 1, 10
Essay 3 (summary and critical commentary of a reading)	20%	1	0.04	4, 2, 3, 6, 5, 7, 8, 1, 10
Exam	30%	2	0.08	4, 2, 3, 6, 5, 7, 8, 1, 10

## Bibliography

### Handbooks:

Common, M., Stagl, S. (2005). *Ecological Economics*. Cambridge University Press, Cambridge.

Jacobs, M. (1991). *The Green Economy*. Pluto Press, London.

Pearce, D.W., Turner R.K. (1990) *Economics of Natural Resources and the Environment*, Harvester Wheatsheaf, London.

### Complementary readings:

Bergh, J., Verbruggen, H. (1999) "Spatial sustainability, trade and indicators: an evaluation of the 'ecological footprint'", *Ecological Economics*, Vol. 29, pp. 61-72.

Boulding, K.E. (1966) "La economía de la futura nave espacial Tierra" en Daly, H.E. (comp.), *Economía, Ecología, Ética*, Fondo de Cultura Económica, México, 1989.

Bromley (1989) "Entitlements, missing markets and environmental uncertainty", *Journal of Environmental Economics and Management*, Vol. 17, pp. 181-194.

Brown, P.G. (1998). "Towards an economics of stewardship: the case of climate", *Ecological Economics*, Vol. 26, pp. 11-21.

Cañellas, S., Citlalic, A., Puig, I., Russi, D., Sendra, C., Sojo, A. (2004) "Material flow analysis of Spain", *International Journal of Global Environmental Issues*, Vol. 4, No.4 pp. 229 - 241.

Daly, H. E. (1999), "Steady-state economics: avoiding uneconomic growth" en J.C.J.M. van den Bergh (ed), *Handbook of Environmental and Resource Economics*, Edward Elgar, Chelktenham, UK, pp. 655-642.

Daly, H.E. (1997) "Georgescu-Roegen versus Solow/Stiglitz" y respuestas de Solow, R.M. y Stiglitz, J.E., *Ecological Economics*, 22 (3), pp. 261-270.

Dasgupta, S.; Laplante, B.; Wang, H. y Wheeler, D. (2002): "Confronting the environmental Kuznets curve", *Journal of Economic Perspectives*, vol. 16, pp. 147-168.

Diamond, P.A., Hausman, J.A. (1994) "Contingent valuation: is some number better than no number?", *Journal of Economic Perspectives*, Vol. 8, pp. 45-64.

Ekins, P. (1997): "The Kuznets curve for the environment and economic growth: examining the evidence", *Environment and Planning A*, vol. 29, pp. 805-830.

Hardin, G. (1968) "The Tragedy of Commons" en *Science*, Vol. 162, pp. 1243-1248. (Versión en castellano disponible en: <http://eumed.net/cursecon/textos/hardin-tragedia.htm>).

Kelman, S. (1981) "Cost Benefit Analysis: An Ethical Critique" (y respuestas de diferentes autores), *AEI Journal on Government and Society Regulation*, pp. 33-40.

Markandya, A., Pearce, D. "Natural environments and the social rate of discount", *Project Appraisal*, Vol. 3, pp. 2-12

Nordhaus, W. (2007) "The Stern review on the economics of climate change" a comment.

- Ostrom, E., Burger, J., Field, C.B., Norgaard, R.B., Policansky, D. (1999) "Revisiting the Commons: Local Lessons, Global Challenges", *Science* 284. pp. 278-282
- Padilla, E. (2002) "Intergenerational Equity and Sustainability", *Ecological Economics*, Vol. 41 n.1, pp. 69-83.
- Pearce, D.W., Atkinson, G.D. (1993) "Capital Theory and the measurement of sustainable development: an indicator of "weak" Sustainability", *Ecological Economics*, Vol. 8, pp. 103-108.
- Schmalense, R., Joskow, P.L., Ellerman, A.D., Montero, J.P., Bailey, E.M. (1998), "An Interim Evaluation of Sulfur Dioxide Emissions Trading?", *Journal of Economic Perspectives*, 12 (3), pp. 53-68; también en Stavins (2000).
- Spash, C. L., (2007) "The economics of climate change impacts a la Stern: Novel and nuanced or rhetorically restricted?," *Ecological Economics*, 63 (4), pp. 706-713.
- Spash, C.L. (2010) "The Brave New World of Carbon Trading", *New Political Economy*, Vol. 15(2), pp. 169-195.
- Stern, N. (2007) "STERN REVIEW: La economía del cambio climático", Resumen
- Stern, D.I., Common, M.S. y Barbier, E.B., (1996), "Economic growth and environmental degradation: the environmental Kuznets curve and sustainable development", *World Development*, 24, pp. 1151-1160.
- Victor, P.A. (1991) "Indicators of sustainable development: some lessons from capital theory", *Ecological Economics*, Vol. 4, pp. 191-213.