

Degree	Type	Year
2501573 Economics	OT	3
2501573 Economics	OT	4

Contact

Name: Jesus Ramos Martin

Email: jesus.ramos@uab.cat

Teachers

Claudio Cattaneo

Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

They have not been established.

Objectives and Contextualisation

The objective of the subject is twofold, on the one hand, to understand the basic concepts of economics that must allow us, on the other, to understand human systems as open systems for the entry of energy and materials and the exit of waste. In other words, the biophysical functioning of economies is studied, which is known as "social metabolism" and the role that natural resources have in maintaining the economic system.

The course also studies the application of economic theory to the analysis and management of natural resources. Decisions on renewable and exhaustible natural resources and on pollution can be based on the balance of monetary costs and benefits. But this approach has limitations. For this reason, the alternative of multi-criteria evaluation of resource management decisions is also proposed.

Competences

Economics

- Analyse situation in which there is unequal information between the two sides involved.
- Capacity for adapting to changing environments.

- Demonstrate initiative and work individually when the situation requires it.
- Formulate recommendations of economic policy that improve efficiency and equity in market operations.
- Identify the processes that govern the operation of markets in different competition systems, different scenarios of interrelationship and different timescales.
- Organise the work in terms of good time management, organisation and planning.
- Select and generate the information necessary for each problem, analyse it and take decisions based on that information.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Students must develop the necessary learning skills in order to undertake further training with a high degree of autonomy.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
- Take decisions in situations of uncertainty, demonstrating an entrepreneurial and innovative attitude.

Learning Outcomes

1. A capacity of oral and written communication in Catalan, Spanish and English, which allows them to summarise and present the work conducted both orally and in writing.
2. Analyse the operating conditions of markets and other forms of social interaction.
3. Capacity to adapt to changing environments.
4. Consider formal models which can be used to study situations with information asymmetry between the parts.
5. Demonstrate initiative and work independently when required.
6. Identify the basic elements that characterise the organisation of a market.
7. Identify the conditions and processes that generate externalities as well as the problems posed by public goods.
8. Identify the consequences of the existence of information asymmetry among different economic agents on the way in which these organise themselves and on the efficiency of the relationship they establish.
9. Make decisions in situations of uncertainty and show an enterprising and innovative spirit.
10. Organise work, in terms of good time management and organisation and planning.
11. Propose the optimum design of the institutions regulating the markets and of its equipment.
12. Solve the models formulated to obtain empirically stable predictions.
13. Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
14. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
15. Students must develop the necessary learning skills in order to undertake further training with a high degree of autonomy.
16. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
17. Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
18. Use basic optimisation tools and the game theory, and include these elements in a theoretical model.

Content

MONETARY VALUATION OF THE ENVIRONMENT

The environment in the history of economic thought

Difference between ecological value and economic value

Families of monetary valuation methods

Total economic value

Discount rate

ENVIRONMENTAL ECONOMIC POLICY

Externalities

Optimal pollution level

Internalization of externalities

Pigou and green taxation

Coase and emissions trading

Payment for environmental services

COST - BENEFIT ANALYSIS

Economic and political democracy

Arrow's impossibility theorem

Kaldor-Hicks Compensation Criterion

Relationship between efficiency and equity

CBA and sustainable development

Risk, uncertainty and irreversibility

MULTI-CRITERIA ANALYSIS

Methodological foundations

Complexity and Post Normal Science

Multicriteria evaluation and economic theory

Structuring a multi-criteria problem

Alternatives and criteria

Weighting of criteria

Donut Economy

SOCIAL METABOLISM

Energy and material flows

Energy policy: peak oil, renewable energy

DEGROWTH THEORY

Sources of decrease

political ecology

Criticism of development and pluriverse

Ecologically unequal exchange and decolonization

The economy as an open subsystem within the biosphere

Current environmental problems

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Lecture	32.5	1.3	2, 3, 1, 6, 7, 8, 5, 10, 4, 9, 11, 12, 18
Practical sessions: Development of group work, presentation and discussion in class	17	0.68	2, 1, 5, 10, 9, 12
Type: Supervised			
Tutorials and follow-up of the work to be carried out	7.5	0.3	2, 3, 1, 6, 7, 8, 5, 10, 4, 9, 11, 12, 18
Type: Autonomous			
Reading and studying theory	70	2.8	2, 1, 6, 8, 10, 12
Search for information	17	0.68	5

1. Master class and guided debates

The teacher will perform an analytical conceptualization and an updated synthesis of each of the study topics shown in the teaching units. The aim of this activity is to facilitate the transmission of knowledge and motivation for the analysis of the relationship between human activity and the environment, which are focused in order to promote active and cooperative learning.

2. Practical sessions

The practical sessions will consist of presentations and the semi-structured discussion that defines the group. This activity will also serve to relate the fundamental concepts of the subject and give proposals for resolving conflicts both from the perspective of Environmental Economics and from the perspective of Ecological Economics.

3. Tutorials

The learning process and acquisition of skills will be supervised by the teacher through individual and / or group tutorials. The teacher will be available to students to resolve doubts and follow the evolution of the aforementioned process of learning and acquisition of skills of students.

4. Virtual Campus of the subject

Inface-to-face teaching, the Virtual Campus is a useful tool, so that students have a complementary space where they can access different types of materials that the teacher considers basic to advance in the learning process of the subject. To access it, all you have to do is go to the UAB website and there you will find the link, or directly to the website of the virtual campus (<https://cv.uab.cat/portada/ca/>).

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Final Essay	30	2	0.08	2, 1, 7, 9, 11, 16, 12
First partial exam	35	2	0.08	17, 3, 6, 8, 5, 4, 15, 18
Second partial exam	35	2	0.08	2, 3, 1, 6, 7, 8, 5, 10, 4, 9, 11, 14, 13, 12, 18

Assessment

CONTINUOUS EVALUATION

The evaluation of the subject will be based on a continuous evaluation of the process of acquisition of knowledge and skills by the student and will consist of:

- 2 partial knowledge exams that may combine multiple choice and thematic questions and that will count for 35% of the final grade each.
- A final essay, which will count for 30% of the final grade.

Calendar of evaluation activities

The dates of the evaluation activities (midterm exams, exercises in the classroom, assignments, ...) will be announced well in advance during the semester.

The date of the final exam is scheduled in the assessment calendar of the Faculty.

"The dates of evaluation activities cannot be modified, unless there is an exceptional and duly justified reason why an evaluation activity cannot be carried out. In this case, the degree coordinator will contact both the teaching staff and the affected student, and a new date will be scheduled within the same academic period to make up for the missed evaluation activity." Section 1 of Article 264. Calendar of evaluation activities (Academic Regulations UAB).

Students of the Faculty of Economics and Business, who in accordance with the previous paragraph need to change an evaluation activity date must process the request by filling out an Application for exams' reschedule: [e-Formulari per a la reprogramació de proves](#).

Grade revision process

After all grading activities have ended, students will be informed of the date and way in which the course grades will be published. Students will be also be informed of the procedure, place, date and time of grade revision following University regulations.

Retake Process

"To be eligible to participate in the retake process, it is required for students to have been previously been evaluated for at least two thirds of the total evaluation activities of the subject." Section 2 of Article 261. The recovery (UAB Academic Regulations). Additionally, it is required that the student to have achieved an average grade of the subject greater than or equal to 3.5 and less than 5.

The date of the retake exam will be posted in the calendar of evaluation activities of the Faculty. Students who take this exam and pass, will get a grade of 5 for the subject. If the student does not pass the retake, the grade will remain unchanged, and hence, student will fail the course.

Irregularities in evaluation activities

In spite of other disciplinary measures deemed appropriate, and in accordance with current academic regulations, "in the case that the student makes any irregularity that could lead to a significant variation in the grade of an evaluation activity, it will be graded with a 0, regardless of the disciplinary process that can be instructed. In case of various irregularities occur in the evaluation of the same subject, the final grade of this subject will be 0". Section 11 of Article 266. Results of the evaluation. (UAB Academic Regulations).

COMPREHENSIVE EVALUATION

By requesting the comprehensive evaluation the student waives the option of continuous evaluation.

The comprehensive evaluation must be requested at the Academic Management (Gestió acadèmica) of the Campus where the degree/master's degree is taught. The request must be filed according to the procedure and the deadline established by the administrative calendar of the Faculty of Economics and Business.

- *Student attendance is mandatory on the day of the comprehensive assessment. The date will be the same as that of the final exam of the semester as per the evaluation calendar published by the Faculty of Economics and Business and approved by the Faculty's Teaching and Academic Affairs Committee. The duration of the comprehensive assessment must be specified in the characteristics of such activity.*
- *100% of the evaluation evidences must be handed in by the student on the day of the comprehensive assessment.*
- *The evaluation evidences carried out in person by the student on the same day of the comprehensive assessment must have a minimum weight of 70%.*

<i>Evidence Type</i>	<i>Weight in the final assessment (%)</i>	<i>Duration of the activity</i>	<i>Is the activity that corresponds to this evaluation evidence to be carried out in person on the date scheduled for the comprehensive evaluation? (YES/NO)</i>
<i>Exam</i>	<i>70%</i>	<i>3h</i>	<i>Yes</i>
<i>Essay</i>	<i>30%</i>		<i>No</i>
<i>TOTAL</i>	<i>100%</i>		

For the retake procedure, no distinction is made between students who have followed the continuous evaluation and those who have opted for the comprehensive evaluation. All will be re-assessed using the same test or evaluation evidence.

The review of the final qualification will follow the same procedure as for the continuous evaluation.

Bibliography

BIBLIOGRAPHY (basic one in bold characters)

Common, Michael S., and Sigrid Stagl (2005). ***Ecological Economics: an Introduction***. Cambridge: Cambridge University Press.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991010751826406709

Daly, Herman E., and Joshua C. Farley (2011). ***Ecological Economics: Principles and Applications***. 2nd ed. Washington: Island Press.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991001531189706709

Costanza, R., Segura, O., & Martínez Alier, J. (1996). *Getting down to earth: practical applications of ecological economics*. Island Press.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991004699359706709

Martínez Alier, Joan., and Klaus Schlüpmann (1987). *Ecological Economics: Energy, Environment and Society*. Oxford: Basil Blackwell.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991001038929706709

Padilla Rosa, E. and Ramos-Martin, J. (Eds.) (2023): *Elgar Encyclopedia of Ecological Economics*. Cheltenham: Edward Elgar Publishing Ltd. ISBN: 978-1-80220-040-9.

Villamayor-Tomas, Sergio., and Roldan. Muradian (Eds.) (2023). *The Barcelona School of Ecological Economics and Political Ecology A Companion in Honour of Joan Martinez-Alier*. Cham: Springer International Publishing. https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991010787421306709

Software

There is no need for specific software.

Language list

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	8	English	first semester	morning-mixed
(TE) Theory	8	English	first semester	morning-mixed