UAB Universitat Autônoma de Barcelona

Introduction and Challenges of Environmental Sciences

Code: 106757 ECTS Credits: 6

2024/2025

Degree	Туре	Year	
2504604 Environmental Sciences	FB	1	

Contact

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Teaching groups languages

You can view this information at the <u>end</u> of this document.

Prerequisites

None.

Objectives and Contextualisation

This is an introductory course to Environmental Sciences with a theoretical-practical approach. Its purpose is to familiarize students with the evolution of the history of environmental studies, the current major challenges in Environmental Sciences, as well as the main environmental issues and conflicts.

Furthermore, students will be introduced to project organization, management and structuring. A field trip will be conducted to study a specific environmental issue in Catalonia, and a practical assignment will be carried out to address the interdisciplinary nature of environmental conflicts and to practice the tools and protocols for project writing and presentation.

The participation of professionals who are experts in various environmental fields will be encouraged so that they can conduct seminars related to the subject matter.

- 1. CM24 (Competence) Act in the field of knowledge of environmental sciences, while assessing the legal, social, economic, scientific and environmental impact.
- 2. CM25 (Competence) Interpret how environmental challenges and programmes contribute to the Sustainable Development Goals.
- 3. CM26 (Competence) Work in teams to tackle problems and case studies associated with current environmental challenges.
- 4. KM35 (Knowledge) Identify the main contemporary challenges in environmental sciences (climate and global change, energy and natural resources, biodiversity, etc.) and the impact that human activities and behaviour have on them.
- 5. KM36 (Knowledge) Recognise the techniques and tools necessary for the integration of scientific, natural, social, economic and legal aspects of the environment.
- 6. SM30 (Skill) Critically examine public and scientific information related to the environment.
- 7. SM31 (Skill) Extract important information from reports, plans, projects, programmes and articles on environmental topics.
- 8. SM31 (Skill) Extract important information from reports, plans, projects, programmes and articles on environmental topics.
- 9. SM32 (Skill) Efficiently and safely use techniques, material and tools related to the environment in the classroom, the field and/or the laboratory.
- 10. SM33 (Skill) Express yourself using (informative and scientific) language appropriate to environmental science challenges, in a clear, explicit and brief way in both scientific and professional fields.

Content

- Introduction to Environmental Sciences
- History of Environmental Sciences
- Interdisciplinary and socio-ecological approach
- Contemporary environmental challenges and global change
- Relevant environmental conflicts
- Field trip to an area with socio-environmental conflict
- Tools for project management, development and presentation
- Project on a socio-environmental conflict

Activities and Methodology

	Title	Hours	ECTS	Learning Outcomes
-	Type: Directed			
	Field trip	6	0.24	CM26, KM35, KM36, SM32
	Lectures	30	1.2	CM24, CM25, KM35, KM36, SM30
(Practicum	6	0.24	CM24, KM35, KM36, SM30, SM31, SM32, SM33
V T	Work in teams	8	0.32	CM26, KM35, KM36, SM30, SM31, SM33
	Type: Supervised			
	Tutoring sessions	2	0.08	CM26, KM36, SM30, SM31

Readings, study of received information, information search,	93	3.72	CM24, CM25, CM26, KM35, KM36,
project preparation			SM30, SM31

In this course, a combination of theoretical sessions, expert seminars or discussions, presentation and debate of selected readings on environmental topics, a field trip, and the completion and presentation of a group project will be incorporated. The learning of socio-environmental conflicts and project development will primarily be conducted through real case studies, and a group project and presentations on a socio-environmental conflict will be undertaken.

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
First term exam	30	2	0.08	CM24, CM25, KM35, KM36, SM33
Project presentation	40	1	0.04	CM25, CM26, KM35, KM36, SM30, SM31, SM32, SM33
Second term exam	30	2	0.08	CM24, CM25, KM35, KM36, SM33

60% of the final grade is calculated based on the average of the grades from two independent midterm exams. The exams will consist of theoretical and practical questions.

The remaining 40% of the final grade corresponds to the grade of a group presentation on a socio-environmental conflict.

To pass the course, the average grade obtained must be equal to or higher than 5 (out of 10), and the grade for each of the midterm exams must be equal to or higher than 4 (out of 10). To be evaluated, attendance at the field trip and submission of the group project are required.

Retake: Those students that do not get the minimum grade to pass the course have the option of a retrieval exame, retrieval one or the two midterm exams. The group project will not have a retrieval option. To participate in the retrieval exam, the students need to attend at least to 2/3 of the evaluation activities.

The students who do not attend any evaluation tests (midterm exams and group work) will receive a final grade of NOT ASSESSABLE.

Bibliography

It will be made available at the beginning of the course.

Software

None.

Language list

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	1	Catalan	second semester	afternoon
(PAUL) Classroom practices	2	Catalan	second semester	afternoon
(PCAM) Field practices	1	Catalan	second semester	morning-mixed
(PCAM) Field practices	2	Catalan	second semester	morning-mixed
(PCAM) Field practices	3	Catalan	second semester	morning-mixed
(PCAM) Field practices	4	Catalan	second semester	morning-mixed
(SEM) Seminars	1	Catalan	second semester	morning-mixed
(SEM) Seminars	2	Catalan	second semester	morning-mixed
(SEM) Seminars	3	Catalan	second semester	morning-mixed
(SEM) Seminars	4	Catalan	second semester	morning-mixed
(TE) Theory	1	Catalan	second semester	afternoon