Universitat Autònoma de Barcelona

Introduction and Challenges of Environmental Sciences

2023/2024

Code: 106757
ECTS Credits: 6

Degree	Type	Year	Semester
Environmental Sciences	FB	1	2

Contact

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Teachers

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Roser Maneja Zaragoza

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Teaching groups languages

You can check it through this link. To consult the language, you will need to enter the subject code. Please note that the information is provisional until 30th November 23

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.

Learning Outcomes

- KM35: 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 behavior have on them.
- KM36: Recognize the techniques and tools necessary for the integration of scientific, natural, social, economic, and legal aspects of the environment.
- SM30: Critically examine public and scientific information related to the environment.
- SM31: Extract important information from reports, plans, projects, programmes, and articles on environmental topics.
- SM32: Efficiently and safely use techniques, materials, and tools related to the environment in the classroom, the field and/or the laboratory.
- SM33: 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.
- CM24: Act in the field of knowledge of environmental sciences, while assessing the legal, social, economic, scientific, and environmental impact.
- CM25: Interpret how environmental challenges and programs contribute to the Sustainable Development Goals.
- CM26: Work in teams to tackle problems and case studies associated with current environmental challenges.

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

Methodology

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.

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.

Activities

Title	Hours	ECTS	Learning outcomes
Type: Directed			
Lectures	30	1.2	KM35,KM36,SM30,CM25
Practicum	6	0.24	KM35,KM36,SM30,SM31,SM32,SM33,CM24,CM25,CM26
Seminars	6	0.24	KM35, KM36, SM30,SM31,SM33,CM26
Field trip	8	0.32	KM35KM36,SM32,CM26
Type: Supervised			
Tutoring sessions	2	0.08	KM36,SM30,SM31,CM26
Type: Autonomous			
Readings, study of received information, information search, project preparation	93	3.92	KM35,KM36,SM30,SM31CM24,CM26

Assessment

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 3.5 (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 retake exame, retaking one or the two midterm exams. The group project will not have a retake option. To participate in the retake exam, the students need to attend at least to 2/3 of the evaluation activities..*

Assessment activities

Title	Weighting	Hours	ECTS	Learning outcomes
First term exam	30/100	2		KM35, KM36,SM33,CM24,CM25
Second term exam	30/100	2		KM35, KM36,SM33,CM24,CM25
Project Presentation	40/100	1		KM35,KM36,SM30,SM31,SM33,CM25,CM26

Bibliography

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

Software