COURSE DATA

DATA SUBJECT

Code: 33105
Name: Environmental interpretation and education
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1104 - Degree in Environmental Sciences	Facultat de Ciències Biològiques	4	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1104 - Degree in Environmental Sciences	Environmental education and interpretation	COMPULSORY

COORDINATION

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SUMMARY

Environmental Education goes beyond knowledge of environmental problems, as it aims to develop attitudes and values of respect towards the environment and to assume responsibilities that lead the individual towards everyday actions, both as professionals and as consumers.

This subject therefore aims to provide students with a systemic vision of the environmental problems caused by human activity, but also to apply methodologies and strategies through which students can develop attitudes that encourage environmentally friendly behaviour.

For their professional training, the aim is to enable students to investigate and develop educational projects and activities, both formal and non-formal.

In the non-formal sphere, there are possibilities in the performance of educational actions aimed at encouraging citizen participation in some environmental management instruments such as Local Agenda 21, which has opened up new possibilities for graduates in Environmental Sciences to act. In the formal sphere, possible actions focus on the educational system as possible teachers of secondary and

baccalaureate.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

Those required in the previous courses of the degree.

COMPETENCES / LEARNING OUTCOMES

1104 - Degree in Environmental Sciences

Be able to communicate orally and in writing.

Be able to design and implement environmental awareness and communication programmes.

Be able to work in a team.

Capacidad de comunicación oral en las exposiciones públicas y de argumentación de opiniones personales.

Capacidad de diseño, planificación y aplicación de diferentes tipos de programas de intervención educativa para la sensibilización ambiental de distintos tipos de públicos.

Capacidad de organizar y planificar el trabajo individual, grupal y el estudio.

Capacidad de reflexión y evaluación formativa de actividades, recursos, campañas y programas de educación ambiental.

Capacidad de tratamiento divulgativo de las informaciones sobre ciencia ambiental.

Compromiso ético en el ejercicio de la profesión de ambientólogo.

Conocer y saber aplicar las diversas técnicas de comunicación, interpretación y educación ambiental.

Conocer y saber utilizar las diferentes fuentes de información y documentación especializada en educación ambiental disponible en todos los ámbitos.

Conocimientos básicos sobre los planteamientos y enfoques de la educación ambiental y dominio de la terminología específica.

Conocimiento y capacidad de aplicación de técnicas y estrategias para hacer más efectiva la comunicación y divulgación de contenidos científicos sobre temas ambientales.

Valorar la importancia que puede tener la educación y los procesos de comunicación como vía para

controlar y minimizar la problemática ambiental a la que se enfrenta la sociedad actual, y conocer sus limitaciones.

DESCRIPTION OF CONTENTS

1. INTRODUCTION

- Action of the human being on the environment.
- The systemic vision and systematization of environmental problems.
- Origin, causes and solutions from an administrative, political, technical and individual perspective
- EA as a response to the environmental crisis. Ecology, environmental problems and environmental education.
- Individual responsibility and involvement in environmental problems.
- Responsible consumption Policy areas.
- Formal, non-formal and informal education.

2. ENVIRONMENTAL EDUCATION

- Environmental education in sustainable development.
- Justification, background and evolution of the E.A. Aims and objectives of the EA.
- Professional profile of environmental educator.
- Levels of action in education-interpretation and environmental communication.
- Evaluation and research in EA.
- Documentary sources and resources for the EA.
- Equipment for the EA.
- EA in the education system.
- Design of programs and didactic units of EA.

3. DIDACTIC STRATEGIES

- EA in environmental management.
- Local Agenda 21.
- Strategies and methodologies for educational intervention
- Education in environmental values.
- Environmental education programmes and projects.
- Research in Environmental Education

4. ENVIRONMENTAL OUTREACH AND COMMUNICATION

- Scientific and environmental dissemination through the media.
- Treatment of environmental information in audiovisual media.
- Analysis and design of publicity campaigns for environmental awareness.
- Environmental dissemination in museums and other exhibition centres.

5. INTERPRETATION OF HERITAGE

- Interpretation of natural and cultural heritage.
- Planning of programs and interpretive plans for natural spaces.
- Design of itineraries and field tours.
- Design of interpretive panels.
- Public use in protected natural areas.

6. PUBLIC PARTICIPATION

- The social role of citizen participation.
- Participation and environmental volunteering.
- Typology and levels of participation.
- Regulatory framework for environmental participation.
- Design of environmental participation programs.
- Social research techniques applied to environmental participation programmes.
- Case studies: Agendas 21; river basins; PORNs.

7. PROJECT DEVELOPMENT

- Projects and teaching units in the formal field.
- Educational intervention in environmental management processes (local Agenda 21, water framework directive, PORN,...).
- Heritage interpretation programmes.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Tutorials	3,00
Theory	36,00
Laboratory	9,00
Computer classroom practice	6,00
Classroom practices	6,00
Total hours	**60,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	5,00
Individual or group project	15,00
Independent study and work	15,00
Preparation of lessons	20,00
Preparation for assessment activities	25,00
Resolution of case studies	10,00

Total hours	**90,00**

TEACHING METHODOLOGY

The teaching-learning process will try to raise in the students the motivation and attitudes necessary for an effective learning of the subject, while offering them the necessary skills for it. Various methodological techniques can be used, which will be used in the following training activities:

Face-to-face sessions:

- Theoretical-practical classes in which the teacher participates with the whole class and in which both the teacher's contributions and those of the groups of students are developed. They are aimed at presenting the basic information on the contents of this subject, through various types of activities that require the active participation of students.
- Practical classes in which students can acquire new knowledge, learn working techniques and develop certain skills and abilities.
- Tutorials for students or groups of students in which the teacher will guide and supervise the tasks assigned to them and attend to their needs. These may be complemented by the use of the virtual classroom.
- Outdoor activities (visits to museums, field trips, etc.) in which the resources offered by the environment will be used for the teaching-learning of the contents of the subject. Whenever possible, these sessions will be scheduled appropriately if they require the use of unusual times or spaces or the collaboration of other specialists.

Non-face-to-face sessions:

- With the aim of helping students to complement their training in what they have been doing in the face-to-face sessions, the teacher will provide guidance and advice on the learning materials that he/she considers useful for this purpose. Students will also have to carry out bibliographical research, group work, use of the virtual classroom, etc., which they need for their training.

EVALUATION

The assessment system will consist of objective tests covering the contents developed in the course (70–100%) and the assessment of practical activities, completed exercises, and class participation (0–30%).

Formative and summative assessments will be used to evaluate students' progress and the achievement of the learning objectives throughout the course. To this end, a variety of assessment methods will be employed, taking into account aspects such as:

- Attendance and participation of each student in the regular course activities (lectures, laboratory sessions, tutorials, etc.), their attitude towards the course, and their ability to work individually and/or as part of a team.

- The preparation of materials or assignments (individually or in groups) whenever these have been required. In some cases, these materials or assignments may be presented and discussed in class.

To assess students' progress, objective tests covering the course contents (70%) will be conducted, and practical activities, completed exercises, and class participation will be monitored (30%).

Students wishing to apply for an early examination session must bear in mind that they must have completed the compulsory activities specified in the course syllabus.

To pass the course, students must independently pass at least 50% of the activities and assignments proposed by each of the lecturers teaching the course.

Exceptionally, in the first examination period, students may choose to take a single written examination accounting for 100% of the final grade. In the second examination period, students may either retain the grade obtained through continuous assessment or choose to pass the course by taking a single written examination accounting for 100% of the final grade.

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