



Universidad  
de Navarra

*Environmental education and communication (F. Ciencias)*

*Guía docente 2025-26*

## INTRODUCTION

**Summary:** Environmental Communication tries to positively influence the development of knowledge, attitudes, and habits in favor of the environment. It is also a tool to promote debate and participation in the environmental problems and challenges of the society.

Environmental Education will introduce the students to one of the professions of an environmentalist. We will start the course by analyzing the human roots of the environmental crisis, and how this is linked to our way of life. We will explore the role of environmental education in our society, and we will learn how to teach children and adults about nature, our relationship with it, and our love for it.

- **Degree:** Environmental Sciences (3rd year), Double degree in Biology and Environmental Sciences (5th year)
- **Module in the degree program:** Module II. Key and cross-disciplinary subjects.
- **ECTS:** 6
- **Year, semester:** 3rd/5th year, 2nd semester
- **Type of course:** Required
- **Instructors:** Ana Villarroja (avillarroya@unav.es); Enrique Cobos (ecobos@unav.es); María Casas (mcasas.1@alumni.unav.es)
- **Language:** Spanish, English
- **Room, Schedule:** room 16, Tuesdays 10.00 to 11.00, Wednesdays 10.00 to 12.00, and Thursdays 9.00 to 10.00

## LEARNING OUTCOMES (Competencies)

### *Basic competences*

CB2. To be able to apply knowledge to professional life and to show competences have been acquired by elaborating and defending ideas and by solving problems within the field of study.

CB3. To be able to gather and interpret relevant data (usually within the field of study) to build opinions that show reflection on relevant social, scientific or ethical issues.

CB4. To be able to communicate information, ideas and answer questions to specialist and non-specialist audiences.

### *Generic competences*

CG1. To manage their own education.

CG2. To think on an integrated way and to tackle problems from different points of view.

CG3. To have critical sense.

CG4. To work as part of a team.

CG5. To have a sense of responsibility towards the environment and the ecosystem.

CG6. To manage information.



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CG7. To communicate environmental issues by written or oral media, adapting language and style to the audience and the context.

### *Specific competences*

CE36. To define the main aspects of corporate social responsibility.

CE37. To develop environmental education and communication programs.

## PROGRAM

### Environmental Communication

1. La comunicación al servicio de la sociedad y el Bien Común.
2. Introducción a la Comunicación Ambiental:
  1. Concepto, objetivo, funciones.
  2. Comunicación Ambiental, Divulgación científica, Comunicación Institucional y Periodismo científico: principales diferencias.
3. Estrategias, tácticas y técnicas de la Comunicación Ambiental.
4. La planificación estratégica de la comunicación: fases para realizar una campaña de comunicación ambiental (Comunicación interna, externa y de crisis)
5. Experiencias prácticas de campañas ambientales.

### Environmental Education

1. Introduction to Environmental Education
  1. What does it mean to educate?
  2. Knowledge based on the student
  3. History and currents of Environmental Education
  4. Objectives, principles and challenges of Environmental Education
2. Environmental Education in conventional and non-conventional contexts
  1. Conventional, non-conventional and informal education
  2. The curriculum
  3. Design of projects and programs of Environmental Education.
3. Tools and perspectives in Environmental Education
  1. How do we learn?
  2. Honoring stages of development
  3. Childhood and Nature: design principles
  4. Non-intellectual approaches to the environment
4. Understanding our environmental problems and challenges
  1. Some insights from psychology and sociology
  2. Cultural context
  3. Ethical and spiritual roots

## EDUCATIONAL ACTIVITIES

**Room sessions:** theoretical or practical classes carried out in the classroom. Eventually, some of these sessions may take place outdoors (these cases will be announced in advance, if they take place).

**Field trips:** two half-day fieldtrips will take place during the course. Specifics will be announced in class and are shown in the course calendar.



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**Teamwork:** the students will work in groups in a specific project the whole semester.

**Personal work:** students will carry out individual assignments throughout the semester, partly at home and partly in class. The professors will announce such assignments at the right time.

## COURSE PROJECT

### Design an educational activity for a real environmental education program

The students will work in groups to design an educational activity for the Science Museum of the university. The students may work on the project during the whole semester. Theoretical lectures are scheduled and planned to guide students and provide them with tools to develop their project.

The proposed timeline is as follows:

1. First session: presentation of the course project.
2. Mid-January: general structure of the project and group organization.
3. February: first draft of project's context and goals.
4. March: final draft.
5. April: implementation of the activity and delivery of the written project.

The written report will include the following contents (may be organized otherwise by each group):

- i. Introduction:
  - Environmental problem/issue the activity will address
  - Description of the target audience
  - Description of the context
- ii. Justification of the project
- iii. Objectives: contents, abilities, values and attitudes
- iv. Description of the activity
- v. Timeline
- vi. Resources for educators
  - Activity outline
  - Role of the educator
  - Supplementary information (if necessary)
- vii. Human and material resources (inventory for these last ones)
- viii. Budget and funding
- ix. Evaluation
  - Objectives
  - Participants' satisfaction
  - Activity (self-evaluation) [this one is not graded, but must be performed as a way of reflecting on the personal learning process]



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x. Communication plan

The grade of this project will represent 40% of the final grade of the Environmental Education part of the course, and 50% of the Environmental Communication part. **All members of the team will get the same grade (exceptions may be made in extreme cases).**

The whole project (written brief and oral presentation) will be carried out in Spanish, as its target audience are native Spanish speakers.

## GRADING

### MAY CALL

The final grade of the course will be calculated as the weighted sum of the final grades of its two parts (Environmental Education and Environmental Communication), as follows:

Course final grade = (Environmental Education final grade x 0.7) + (Environmental Communication final grade x 0.3)

#### *Environmental Communication grading*

Course project: 50% of the EC grade.

Individual tasks: 25% of the EC grade.

Final exam: 25% of the EC grade.

#### *Environmental Education grading*

Course project: 40% of the EE grade. It will be graded according to the criteria described in the "Course project" section above.

Individual assignments: 35% of the EE grade. These exercises will be graded according to the quality of their writing (grammar, orthography), their relation to the reference text, and the depth and coherence of the student's answer to the question.

Final exam: 25% of the EE grade.

Good attitude and participation in class and an exceptional presentation of the course project can raise the final grade.

Spelling mistakes (*errores ortográficos*) can significantly lower the grade of an exercise, exam, or project, when written in the student's native language.

### JUNE CALL

The final exam can be retaken in June. Individual assignments may be retaken in case the student did not pass that part during the semester.

## OFFICE HOURS

*Environmental Communication*: by appointment on the address [ecobos@unav.es](mailto:ecobos@unav.es)

*Environmental Education*: by appointment on the address [avillarroya@unav.es](mailto:avillarroya@unav.es)



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## BIBLIOGRAPHY AND RESOURCES

### *Environmental Communication*

Some online resources will be indicated in class.

### *Environmental Education*

#### Textbooks

Novo, M. (2012). *La educación ambiental. Bases éticas, conceptuales y metodológicas*. (17<sup>a</sup> ed.). Editorial Universitas. [Find it in the library](#)

Carson, R., Kelsh, N., & Lear, L. (1998). *The sense of wonder*. HarperCollins. [Find it in the library](#)

Louv, R. (2010). *Last child in the woods : saving our children from nature-deficit disorder* (Rev. and updated ed.). Atlantic. [Find it in library](#)

#### Other

Chuvieco, E., & Martín, M. Á. (2015). *Cuidar la Tierra: razones para conservar la naturaleza*. Palabra. [Find it in library](#)

Emerson, R. W., Digitalia, I., Alcoriza, J., & Lastra, A. (2014). *Naturaleza y otros escritos de juventud*. Biblioteca Nueva. [Find it in library](#)

Sobel, D. (2013). *Beyond Ecophobia. Reclaiming the Heart in Nature Education*. (2nd ed.). Orion Society. [Find it in library](#)

Sobel, D. (2008). *Childhood and Nature. Design principles for educators*. Stenhouse Publishers. [Find it in library](#)

Tilden, F. (1977). *Interpreting our heritage* (3th ed.). University of North Carolina Press. [Find it in library](#)

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