

**Environmental Education and Communication**

Code: 102826  
ECTS Credits: 6

Degree	Type	Year	Semester
2501915 Environmental Sciences	OT	4	0

**Contact**

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**Use of Languages**

Principal working language: catalan (cat)  
Some groups entirely in English: No  
Some groups entirely in Catalan: Yes  
Some groups entirely in Spanish: No

**Prerequisites**

To have completed the first cycle of the degree of Environmental Sciences

**Objectives and Contextualisation**

Contextualization / objectives

Environmental education is an opportunity to reflect and advance in the design of curricula, training models and competency proposals that favor the formation of a citizenry capable of addressing the challenges that a globalized and complex world demands us.

The subject takes as a starting point the recent research and innovation in environmental education and consumer education as diverse ways of addressing, from education, relationships between people and the environment and between one's own people. This is framed in a globalized and complex world that shows mismatches at various scales.

At the end of the first decade of the 21st century, the world faces important, complex and interrelated challenges and problems that affect lifestyles, values and development. Challenges arise from values that have created, and believe, unsustainable societies. We have the knowledge, technology and skills necessary to invest the situation, therefore we must mobilize our potential to take advantage of all the opportunities to improve the action and to foster changes. Education is key in this process of transformation. Such education must be of such quality, which facilitates the clarification of values, the acquisition of knowledge, the development of aptitudes and competences necessary to participate in the positive transformation of society. Through education and lifelong learning, we can forge lifestyles based on social and economic justice, food security, responsible consumption, ecological integrity, sustainable livelihoods, respect towards all forms of life and solid values that promote social cohesion, democracy and collective action.

Environmental Education and Communication must take up this challenge and highlight the interdependence between the environment, the economy, society and cultural diversity, from the local to the global, and take into account the dimension of time (past, present and future).

Education and Environmental Communication requires complex structures, as there are many links that make up the link between environmental quality, equality, human rights, peace, equity, solidarity, etc. She must invite us to introduce ourselves in the culture of complexity, in the use of critical thinking for exploration and challenge, in the clarification of values, to reflect on the value of the action, participation and the collaboration.

Focus on creative and critical approaches, long-term thinking, innovation and autonomy to face uncertainty and solve complex problems and situations.

- Know diversity of approaches to Education and environmental communication.
- Identify and value the contributions of environmental education in education for citizens.
- Explore, identify and manage Teaching and Learning instruments in Environmental Education.
- Explore, identify and handle strategies and instruments of Environmental communication.
- Design and Analyze Environmental education and communication practices in different contexts (formal education, non-formal education, citizen participation ...)

## Competences

- Adequately convey information verbally, written and graphic, including the use of new communication and information technologies.
- Analyze and use information critically.
- Collect, analyze and represent data and observations, both qualitative and quantitative, using secure adequate classroom, field and laboratory techniques
- Demonstrate adequate knowledge and use the most relevant environmental tools and concepts of biology, geology, chemistry, physics and chemical engineering.
- Demonstrate adequate knowledge and use the tools and concepts of the most relevant social science environment.
- Demonstrate concern for quality and praxis.
- Demonstrate initiative and adapt to new situations and problems.
- Develop communication strategies on environmental issues, including environmental risks
- Information from texts written in foreign languages.
- Integrate physical, technological and social aspects that characterize environmental problems.
- Learn and apply in practice the knowledge acquired and to solve problems.
- Quickly apply the knowledge and skills in the various fields involved in environmental issues, providing innovative proposals.
- Teaming developing personal values regarding social skills and teamwork.
- Work autonomously

## Learning Outcomes

1. Adequately convey information verbally, written and graphic, including the use of new communication and information technologies.
2. Analyze and use information critically.
3. Communicate environmental problems with proper attention to the problems of environmental risk and the relevant regulations in the fields of safety and environmental health.
4. Demonstrate concern for quality and praxis.
5. Demonstrate initiative and adapt to new situations and problems.
6. Demonstrate knowledge of some of the main areas of scientific disciplines environment.
7. Demonstrate knowledge of some of the main areas of the social sciences in the environment.
8. Identify processes sciences, life sciences and social sciences in the surrounding environment and evaluate them properly and originally.
9. Information from texts written in foreign languages.
10. Knowing the main theories and methodologies of environmental education and communication and the ability to apply to practical cases these theoretical teachings.
11. Learn and apply in practice the knowledge acquired and to solve problems.
12. Observe, recognize, analyze, measure and properly and safely represent environmental processes.
13. Teaming developing personal values regarding social skills and teamwork.
14. Work autonomously

## Content

- Environmental Education: historical perspective, evolution and cartography of various currents
- Education and Environmental Communication: purpose, objectives, key components and methodological approaches
- Strategies in Environmental Education in different areas of intervention: formal education, no formal and informal
- Strategies in Environmental Communication in different fields of intervention: formal education, no formal and informal
- Environmental Education and Communication from the perspective of complexity.
- The Quality Criteria in Education and environmental communication.
- Professional competencies in Education for Sustainability.
- The design, preparation and evaluation of a project or teaching material in environmental education and communication.

## Methodology

The training activity will be developed based on the following dynamics:

- Master classes / exhibitions by the teacher
- Reading, Analysis and discussion of articles and documentary sources
- Classroom practices: problem solving / cases / exercises.

Tutorials.

The student in the process of teaching learning is the student and it is under this premise that the methodology of the subject has been planned. The types of activities have been diversified to guarantee the attention to the diversity and the connection between the students and the competences from the individual and group dimensions and from the work out of the classroom and activities in the classroom.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Teachers' lectures on contents and basic issues on the agenda. It is done with the whole class group and allows the presentation of the main contents through an open and active participation by the students (theory)	22	0.88	2, 11, 3, 10, 6, 7, 4, 8, 12, 1, 13
Workspace in small groups supervised by the teacher for the analysis or preparation of activities and / or curricular materials; case study, field activities to deepen proposed topics (classroom practices)	20	0.8	2, 11, 3, 5, 4, 9, 1, 14, 13
workshops: field work and case resolution	8	0.32	11, 5, 12, 14, 13
Type: Autonomous			

Analysis of readings, proposals for didactic innovation, design of activities, carrying out of reports, analysis and resolution of cases	91	3.64	11, 3, 5, 4, 8, 9, 14, 13
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## Assessment

- Individual face-to-face exam
- Participation in the subject (individual and group)
- Delivery of reflections and practices.
- Design of an action of education and environmental communication in cooperative groups of work.

The evaluation of the subject will be carried out throughout the entire academic year through a diversity of training activities.

Attendance at the practical classes is mandatory. The student must attend a minimum of 80% of the practical hours and may not pass the subject if he does not attend the activities proposed without an obvious proof or justification.

To pass the subject, you must obtain a minimum of five in each one of the blocks and evaluation activities.

As a continuous evaluation, there will be no partial exam and the final and recovery test (40%) will be carried out on the day assigned by the Degree in Environmental Sciences. To participate in the recovery the students must have been previously evaluated in a set of activities whose weight must be equivalent to a minimum of 2/3 of the total grade of the subject.

The rest of the assessment activities in case of not exceeding 5 will be proposed to the student an alternative way of recovery provided the student has shown an attitude compatible with the educational profession and has shown active listening skills, respect, participation, cooperation, empathy, kindness, punctuality, argue, use of the appropriate mobile phone, etc.

The copy or plagiarism, both in the case of works and in the case of exams, constitute an offense that may represent suspending the subject.

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Follow-up of the work and participation in the subject (individual and group)	15	2	0.08	2, 11, 3, 5, 4, 9, 1, 14, 13
cooperative group work	45	5	0.2	2, 11, 3, 10, 7, 5, 4, 8, 1, 14, 13
individual examination	40%	2	0.08	2, 11, 3, 10, 6, 7, 12, 1, 14

## Bibliography

The elaborated bibliography considers a perspective of gender and with predominance of authors.

BAUMAN, Z. (2005). The liquid-modern challenges to education. In S. Robinson & C. Katulushi (Eds.), *Values in Higher Education*. University of Leeds.

BONIL, J.; PUJOL, R.M. (2011). Educación científica a propósito de la palabra crisis. *Enseñanza de las ciencias*. 29(2) pp. 252-261

- BONIL, J.; CALAFELL, G.; GRANADOS, J.; JUNYENT, M.; TARÍN, R.M. (2012) Un modelo formativo paravanzar en la ambientalización curricular. PROFESORADO. Revista de Currículum y Formación del Profesorado, 16(2), 145-163
- BONIL, J.; JUNYENT, M.; PUJOL, R.M. (2010). Educación para la sostenibilidad desde la perspectiva de la complejidad. *Revista EUREKA, Enseñanza y Divulgación de Ciencias*, 7, 198-215.
- BONIL, J.; CALAFELL, G. (2014) Identificación y caracterización de las concepciones de medio de un grupo de profesionales de la educación ambiental. *ENSEÑANZA DE LAS CIENCIAS*, 32.3, 205-225
- CALAFELL, G.; JUNYENT, M.; BONIL, J. (2015) Un propuesta para ambientalizar el currículum. Transferencia entre universidad y aula. *CUADERNOS DE PEDAGOGÍA*, 460, 56-60
- CALAFELL, G., BANQUÉ, N., VICIANA, S. (2019). Purchase and use of new technologies among young people: Guidelines for sustainable consumption education. *Sustainability (Switzerland)*, 11(6).  
<https://doi.org/10.3390/su11061541>
- GARCIA, J. E., ARROYO, J., & RODRÍGUEZ, F. (2019). Más allá de la sostenibilidad: por una Educación Ambiental que incremente la resiliencia de la población ante el decrecimiento. *Revista De Educación Ambiental Y Sostenibilidad*, 1(1)(14), 1101-1115. Retrieved from [http://dx.doi.org/10.25267/Rev\\_educ\\_ambient\\_sostenibilidad.2019.v1.i1.1101%0Ahttps://revistas.uca.es/index.php](http://dx.doi.org/10.25267/Rev_educ_ambient_sostenibilidad.2019.v1.i1.1101%0Ahttps://revistas.uca.es/index.php)
- GUTIERREZ, J.M. (2018). *Educación ambiental. Invitación a la educación ecosocial en el Antropoceno*. Madrid: Editorial Bubok.
- HICKS, D. (2002) *Lessons for the future. The missing dimension in education*. London and New York: Routledge
- INNERARITY, D. (2011). *La democracia del conocimiento. Por una sociedad inteligente*. Barcelona. Paidós.
- JOSÉ, B. M., MURGA, M. Á., & NOVO, M. (2019). La Educación Ambiental en el S. XXI (página en construcción, disculpen las molestias). *Revista De Educación Ambiental Y Sostenibilidad*, 1(1), 1103-1115. Retrieved from [http://dx.doi.org/10.25267/Rev\\_educ\\_ambient\\_sostenibilidad.2019.v1.i1.1103](http://dx.doi.org/10.25267/Rev_educ_ambient_sostenibilidad.2019.v1.i1.1103)  
<https://revistas.uca.es/index.php/ReAys/index>
- JUNYENT, M.; GELI, A.M. (2008) Education for sustainability in university studies: a model for reorienting curriculum. *British Educational Research Journal*, 34(6), 763-783
- MAYER, M. (2002). Ciudadanos del barrio y del planeta. En F. Imbernon, (Coord). Cinco ciudadanías para una nueva educación, 83-104. Barcelona: Graó.
- MAYOR ZARAGOZA, F. (2009). La problemática de la sostenibilidad en un mundo globalizado. *Revista de Educación*. Número extraordinario, 25-52. Madrid: Ministerio de Educación.
- PUJOL, R.M. (1996). Educación y Consumo, Barcelona, Horsori.
- PUJOL, R.M. (2000) Ambientalizació i escola. *Perspectiva Escolar*, 235, 2-7
- SAUVE, L.(1999).Environmental education, between Modernity and Postmodernity. *Canadian Journal of Environmental Education*, 4, 9-35.
- SAUVÉ, L. (2004) Una cartografia de correntes de educação ambiental. En Sato, Michèle, Carvalho, Isabel (Orgs). *A pesquisa em educação ambiental: cartografias de uma identidade narrativa em formação*. Porto Alegre: Artmed.
- SLEURS, W.(coord) (2008) *Competencies for ESD(Education for Sustainable Development)- Teachers*. Leuven, Bélgica
- TILBURY, D.; Wortman, D. (2004) Engaging people in sustainability. Commission on Education and Communication, IUCN, Gland, Switzerland and Cambridge, UK.

WALS, A.E.J., STEVENSON, R., BRODY, M. i DILLON, J. (2013). Tentative Directions for Environmental Research in Uncertain Times. *International Handdbook of Research on Environmental Education*. American Education Research Associaton. pp.542-549

<http://www.uab.cat/mediambient/>

<http://www.ensi.org/>

[www.unescocat.org](http://www.unescocat.org)

<http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-dev>

<http://www.unesco.org/education/tlsf/>

<https://sustainabledevelopment.un.org>