

Academic Year/course: 2022/23

25221 - Environmental education

Syllabus Information

Academic Year: 2022/23

Subject: 25221 - Environmental education

Faculty / School: 201 - Escuela Politécnica Superior

Degree: 571 - Degree in Environmental Sciences

ECTS: 6.0

Year:

Semester: Second Four-month period

Subject Type: Optional

Module:

1. General information

1.2. Context and importance of this course in the degree

Environmental education is a fundamental subject of the Degree in Environmental Sciences, since it raises activities to be developed in parallel to many disciplines of the career. Subjects such as biodiversity conservation, energy efficiency, environmental impact assessment, land use planning, etc. have a dimension related to the human vision of environmental conflicts and their resolution, tools that are provided by environmental education. And to the achievement of the Sustainable Development Goals, with emphasis on goals 4, 5, 11, 12, 13, 14 and 15. The specific competences that the subject provides to the student are specified in the Syllabus of the Degree in Environmental Sciences and in section 2 of this same guide.

1.3. Recommendations to take this course

This subject is offered in the [English Friendly](#) form

2. Learning goals

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that he/she has achieved the expected learning outcomes through the following global evaluation activities:

- Written test on the basic knowledge of Environmental Education acquired throughout the development of the whole subject, in its theoretical and practical part. It will be a test with short questions and multiple choice answers. The percentage of the final grade is 50%. To be passed with a grade higher than 5.

- Writing and defense of a collective work in the form of an Environmental Education Program or Campaign. The work will be defended by each group of students before the teacher who will ask them questions about its content, development, bibliography, methodology and other aspects. The defense of the work is carried out after 75% of the course has elapsed. The percentage of the final grade is 50%. This activity will be used to evaluate the achievement of the learning results, especially those related to the Sustainable Development Goals indicated in the objectives of the course. To be passed with a grade higher than 5.

Both parts must be passed in order to pass the course.

Success rate

18-19	19-20	21-22
100,00%	100,00%	100,00%

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

Theoretical lectures will be mainly participative. Their development will consist in the explanation by the teacher of a part of the subject, with an active participation of the students. In some cases the theoretical lectures will be devoted to the application of some theoretical concepts seen previously. In other cases students will develop the lecture, preparing previously a part of it, following teacher's suggestions. The teacher will promote active participation of students, posing problems whose resolution is based in the use of Environmental Education or other subject's tools, searching for student's integration and reasoning.

In all there will be 30 theoretical lectures of 50 minutes each, some of them in English, using frequently Power Point presentations.

Practical lectures will be of three different types: field work; classroom lectures and collective tutorials. Field work will be developed in Protected Areas, in order to visit Interpretation Centres and in the natural environments surrounding the Technical School, both related with nature interpretation. Classroom practices will be developed in normal classrooms and in computer classrooms.

Participative processes will be related to different environmental problems; practical cases; bibliographic research; exposition of partial aspect of the collective report students must prepare, etc. Tutorials will be focused on the questions posed by groups students dedicated to elaborate collective reports, in order to discuss on their focus, objectives, structure and development.

In all there will be two days of field work to visit Interpretation Centres (10 hours of teaching); 16 horas of practices, that is 8 hours of practices of 2 hours each; and 2 periods of 2 hours of tutorials.

4.2. Learning tasks

The program includes:

- 1 Visit to Nature Interpretation Centres
- 2 Master lectures
- 3 Films
- 4 Workshops
- 5 Conferences and seminars by specialists
- 6 Legislation and Environmental Programs analysis

4.3. Syllabus

- Communication through technical and scientific writing
- Biodiversity crisis
- Communication theory

- Environmental Education
- Environmental Education Programs
- Campaigns
- The White Book of Environmental Education in Spain
- Aragonese Strategy of Environmental Education
- The Media
- Enterprises and institutions in Environmental Education
- Spanish legislation on Environmental Education
- Nature Interpretation
- International experiences
- Evaluation on Environmental Education Programs
- Responsible consume

4.4. Course planning and calendar

It follows the Saragossa University academic calendar. The subject timetable, classrooms, tutorials and exams can be consulted in the Technical School web page. The information regarding the development of the subject will be presented to the students the first day of the term.

Activities/Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	
On-site activities																						66
Theory	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2							28
Problems			2		2																	4
Laboratory practices	2						2															4
Field work																						0
Group work				5									10		5							20
Tutorials		2										2										4
Evaluation															3	3						6
Non on-site activities																						84
Personal work	2	2	2	1	2	3	2	3	3	3	3	2		2		2	8	4				44
Team work	2	2	2	1	2	3	2	3	5	3	3	2		4		2		4				40
TOTAL	8	8	8	9	8	8	8	8	8	8	8	8	12	8	8	9	8	8	0			150

4.5. Bibliography and recommended resources

- BB** Estrategia Aragonesa de Educación Ambiental (EÁREA). EAREA : Estrategia Aragonesa de Educación Ambiental. Documento / [dirección técnica, Dpto. Medio Ambiente, Gobierno de Aragón ; realización y redacción, Colectivo de Educación Ambiental]. [1ª ed.]. [Zaragoza] : Gobierno de Aragón, Departamento de Medio Ambiente, 2003

- BB** Jornadas de Educación Ambiental de la Comunidad Autónoma de Aragón (3ª. La educación ambiental en Aragón en los albores del siglo XXI). [Zaragoza] : Gobierno de Aragón, Departamento de Medio Ambiente, D.L. 2006
- BB** Lecumberri Beloqui, Guadalupe. Guía para la elaboración de programas de educación ambiental / Guadalupe Lecumberri Beloqui, Javier Arbuniés Erce ; ilustraciones: Esteban Zozaya ?Birilo? [Navarra] : Centro Unesco Navarra, D.L. 2001
- BB** Libro Blanco de la educación ambiental en España en pocas palabras / [coordinación, Susana Calvo Roy y Mercedes González de la Campa]. Madrid : Ministerio de Medio Ambiente, Secretaría General de Medio Ambiente, 1999
- BC** Calvo, Susana. El espejismo de la educación ambiental / por Susana Calvo, José Gutiérrez. [1ª ed.]. Madrid : Morata, D.L. 2006
- BC** Jacobson, Susan K. Communication Skills for Conservation Professionals / Susan K. Jacobson. 2nd. ed. Washington : Island Press, 2009

LISTADO DE URLS:

Agencia de Medio Ambiente y Sostenibilidad del Ayuntamiento de Zaragoza
[<https://www.zaragoza.es/ciudad/medioambiente/>]

Boletín electrónico de la EAREA
[<https://www.aragon.es/-/boletin-electronico-de-la-earea-red-earea->]

Calvo, S., González, M. (coord.) (1999). Libro blanco de la educación ambiental en España en pocas palabras. Madrid: Min Ambiente
[https://www.miteco.gob.es/es/ceneam/recursos/documentos/libro_blanco.aspx]

Centro Nacional de Educación Ambiental, CENEAM
[<https://www.miteco.gob.es/es/ceneam/>]

Centros de Interpretación de la Red Natural de Aragón
[
<https://www.aragon.es/-/centros-de-interpretacion-de-la-red-natural-de-aragon#:~:text=Centro%20de%20Interpretaci%C3%91>
]

Comisión on Education and Communication of IUCN
[<http://www.iucn.org/about/union/commissions/cec/>]

Diputación de Zaragoza. Medio Ambiente
[<http://www.dpz.es/areas/area-de-servicios-y-desarrollo-municipal/servicio-de-recursos-agrarios/medio-ambiente>]

Documento sobre diseño de proyectos en educación ambiental
[http://www.juntadeandalucia.es/medioambiente/educacion_ambiental/disenioProyectos.pdf]

Educación Ambiental. Gobierno de Aragón. Departamento de Medio Ambiente
[<https://www.aragon.es/-/educacion-y-sensibilizacion-ambiental>]

Estrategia aragonesa de educación ambiental, EAREA
[<https://www.aragon.es/-/estrategia-aragonesa-de-educacion-ambiental-earea->]

Guía de educación ambiental. Selección de lecturas y recursos del Centro de Documentación del Agua y el Medio Ambiente
[<http://www.zaragoza.es/contenidos/medioambiente/cda/GuiaEducacionAmbiental.pdf>]

Guía de recursos ambientales de Aragón
[<https://www.aragon.es/-/guia-de-recursos-ambientales-de-aragon>]

Hesselink, F., et al. (2007). Communication, Education and Public Awareness (CEPA). A toolkit for National Focal Points and
[<http://www.cbd.int/cepa/toolkit/2008/doc/CBD-Toolkit-Complete.pdf>]

La Calle Indiscreta. Aula de Medio Ambiente Urbano. Gobierno de Aragón
[<http://www.lacalleindiscreta.es/>]

Novedades y noticias del Ayuntamiento de Zaragoza

[http://www.zaragoza.es/ciudad/centros/buscar_Centro?&temas_smultiple=Medio%20Ambiente]

Red de Entidades Locales por la Sostenibilidad del Alto Aragón, RETE 21

[<https://www.dphuesca.es/la-red>]

Red Natural de Aragón

[<https://www.rednaturaldearagon.com/>]

Treinta años de educación ambiental: una revisión colectiva desde el territorio y los contextos

[https://www.miteco.gob.es/es/ceneam/recursos/pag-web/documentos/treinta_anos.aspx]

The updated recommended bibliography can be consulted in:<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=25221>