

66708 - Evaluation of environmental effects and restoration

Información del Plan Docente

Academic Year	2016/17
Academic center	103 - Facultad de Filosofía y Letras
Degree	328 - Master's in Land and Environmental Planning
ECTS	6.0
Course	1
Period	Annual
Subject Type	Optional
Module	---

1. Basic info

1.1. Recommendations to take this course

1.2. Activities and key dates for the course

2. Initiation

2.1. Learning outcomes that define the subject

2.2. Introduction

3. Context and competences

3.1. Goals

3.2. Context and meaning of the subject in the degree

3.3. Competences

3.4. Importance of learning outcomes

4. Evaluation

5. Activities and resources

5.1. General methodological presentation

The course combines theoretical conceptual parts with case examples and practical work.

The practice charge allows strengthen the use of analysis tools and diagnostics in order to strengthen teamwork.

The analysis of specific and complex cases is taken by the teachers, who have selected a set of examples of various subjects and application results, some of which are visited in the field practices.

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In the development of training activities the theoretical and practical sessions are interspersed with case presentations, always following a consistent thread with the two main sections: impact and restoration. This organization leads to better learning outcomes and enables students to continue developing their personal study and teamwork, achieving a continuous follow the course.

5.2.Learning activities

Lecture sessions. 25 hours

They are used to present the basic concepts of Environmental Impact Assessment and Environmental Restoration. 10 sessions of 2.5 hours are devoted each to these lectures.

Practical activities. 20 hours

There are 8 sessions of 2.5 hours, aimed at the realization of different phases that are included in Environmental Impact Assessment projects and studies.

Lecture sessions and practical activities will alternate.

Directed activities

Apart from lecture sessions, students will develop an Environmental Impact Assessment whose design will be done in class. The study was undertaken in group. Monitoring their implementation will be carried out in tutoring sessions.

The students should also apply to four specific cases the restoration activities evaluation system previously designed in class. The study was undertaken in group. Monitoring their implementation will be carried out in tutoring sessions.

Field work

Two field trips will be made in the course. They serve as a essential complement for the development of practices in Environmental Impact Assessment and Environmental Restoration projects.

Tutoring sessions

Tutoring sessions aim to monitor the orders that students must solve (those contemplated in programming, different of the optional tutorials to which every student is entitled). The tutorials sessions are developed in the offices of teachers.

Assessment

There are four assessment activities subject: Written exam of the lectures lessons, preparation of an Environmental Impact Assessment, design and implementation of a system for evaluating actions in environmental Restoration Projects, and summary of field trips. Only the written test needs a specific time to do (about one hour).

5.3.Program

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The program offered includes the following sections

Lecture sessions (**Structured in six chapters**)

1. Introduction and environmental impact general concepts.
 - 1.1. Introduction.
 - 1.2. General concepts.
 - 1.3. Main principles of Environmental Impact Assessment.
 - 1.4. Levels of Environmental Impact Assessment.
 - 1.5. Typology of impacts.
2. Legal and administrative framework on Environmental Impact Assessment.
 - 2.1. Background.
 - 2.2. The Community legislation.
 - 2.3. State and Aragonese legislation.
 - 2.4. Projects subject to Environmental Impact Assessment.
 - 2.5. The administrative procedure in Environmental Impact Assessment.
3. Methodology for preparing Environmental Impact Assessments.
 - 3.1. Minimum contents of the Strategic Environmental Study.
 - 3.2. Minimum contents of the Environmental Impact Assessment.
 - 3.3. Structure of the Environmental Impact Assessment.
 - 3.4. Environmental Impact Assessment development methodology.
 - 3.5. Corrective measures and environmental surveillance.
4. Ecological concepts, general concepts and environmental restoration rules and regulations.

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4.1. General concepts.

4.2. Environmental restoration rules and regulations.

4.3. Ecological and environmental principles.

5. Methodology for restoration projects.

5.1. Restoration process planning.

5.2. Restoration process structure.

5.3. Restoration techniques and examples of projects.

6. Monitoring and evaluation of restoration projects.

Practical activities.

In these classes the activities performed are:

1. Review of legislation.

2. Internet access servers with environmental information.

3. Revision of examples of environmental impact assessments.

4. Design and production different sections of an environmental impact assessment (project description, environmental inventory, environmental factors tree, selection of alternatives, evaluation of alternatives, identification and assessment of impacts).

5. Revision of examples of environmental restoration projects.

6. Design of a system of assessment of environmental restoration actions

5.4.Planning and scheduling

Schedule sessions and presentation of works

We develop the classroom activity during February and March. The activity of the course finishes after the assessment test of the theoretical part.

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Lecture sessions and practical activities take place in a classroom with capacity for 18 students, computers with Internet access, projector and blackboard. Field trips will be held in different parts of the Aragonese geography.

Session	Thematic section	Activities
1	1	Lecture sessions, practical activities: Internet access servers, Revision of examples of environmental impact assessments
2	2	Lecture sessions, practical activities: Review of legislation
3	3	Lecture sessions, practical activities: Design and production of an environmental impact assessment
4	3	Lecture sessions, practical activities: Design and production of an environmental impact assessment
5	3	Lecture sessions, practical activities: Design and production of an environmental impact assessment
6	3	Lecture sessions, practical activities: Design and production of an environmental impact assessment
7	3	Lecture sessions, practical activities: Design and production of an environmental impact assessment
8	3	Lecture sessions, practical

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		activities: presentation and case assessment
9	3	Lecture sessions, practical activities: presentation and case assessment
10	4	Lecture sessions, practical activities: Design of a system of assessment of environmental restoration actions
11	4	Lecture sessions, practical activities: Design of a system of assessment of environmental restoration actions
12	4	Lecture sessions, practical activities: Design of a system of assessment of environmental restoration actions
13		Field work
14	5	Lecture sessions, practical activities: study cases presentation
15	5	Lecture sessions, practical activities: study cases presentation
16	5	Lecture sessions, practical activities: study cases presentation
17		Field work
18	5	Lecture sessions, practical activities: Applying a system of assessment in restoration projects
19	6	Lecture sessions, practical

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		activities: Applying a system of assessment in restoration projects
20		Workgroup presentation
21		Written test

5.5. Bibliography and recommended resources

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