

25230 - Environmental impact assessment

Información del Plan Docente

Academic Year	2016/17
Academic center	201 - Escuela Politécnica Superior
Degree	277 - Degree in Environmental Sciences
ECTS	6.0
Course	4
Period	First Four-month period
Subject Type	Compulsory
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 learning process that is designed for this subject is based on:

The theoretical sessions will consist in participatory lectures. Besides, they may include the participation of external experts and seminars realized by students.

25230 - Environmental impact assessment

Two types of practical activities will be developed: a) Field trips in order to analyse and discuss in situ the impacts of different projects; b) Review of reports and documents from different Environmental Impact Studies. Besides, the collaborative work group will be developed in these seminars under the supervision of the teacher.

5.2.Learning activities

The program includes the following activities:

- **Theory sessions.** Classroom activity in which the contents of the proposed topics will be developed. The total duration of this activity will be 10 hours.
- **Seminars.** Classroom activity in which different examples of environmental impact studies will be studied. Besides, the cooperative work be developed and presented in these classes. (20 sessions of 2 hours).
- **Collaborative work.** Development of the collaborative work in groups of three members.
- **Field practices** to analyse in situ an Environmental Impact Project.
- **Tutorials.**

5.3.Program

Theory Programme

I: INTRODUCTION TO THE CONCEPT OF EIA

1.1. Introduction to the concept of EIA

II: ADMINISTRATIVE METHODOLOGY OF EIA: THE LEGAL FRAMEWORK

2.1. Legal precedents and specific regulations.

2.2. EIA procedures according to state legislation.

2.3. EIA legislation within the autonomous region of Aragon.

III: DEVELOPMENT OF THE ENVIRONMENTAL IMPACT STUDY. METHODOLOGIES.

3.1. Environmental impact. Concepts and characteristics.

3.2. Content of environmental impact studies.

3.3. Description of the project and specific actions. Examination of alternatives.

3.4. Environmental inventory.

3.5. Evaluation of impact. Methodologies.

25230 - Environmental impact assessment

3.6. Correction and control of impact.

IV: AN EVALUATION OF THE ENVIRONMENTAL IMPACT OF KEY PROJECTS AND ACTIVITIES

4.1. Extractive activities

4.2. Lineal infrastructure

4.3. Wind farms

4.4. Dams

4.5. Irrigation projects

Practical Programme

1. Projects review (some of the next projects will be reviewed):

- Quarry "Los Quebraderos de La Serrana" EsIA.
- Enlargement of the "Yesa" dam EsIA.
- Road to the "Javalambre" ski station by the southern slope-side EsIA.
- Electric line "Mezquita de Jarque-Teruel" EsIA.

2. Analysis of the "Biscarrués" dam EsIA

- Land and water uses in the "Gállego" catchment
- Environmental and socio-economic traits of the potentially affected area
- Geological and biological traits of the potentially affected area

25230 - Environmental impact assessment

- EslA's official documents

- Other documents

5.4.Planning and scheduling

The classroom activities will be realized according to the established schedule of classes published on the website of the Escuela Politécnica of Huesca.

The delivery date of the work, as well as field trips will be established at the beginning of the course.

The student must expend to this subject a total of 150 hours approximately, according to the following breakdown:

- 10 hours of theory classes
- 40 hours of seminars with practical exercises
- 10 hours of field visits
- 40 hours of autonomous work
- 50 hours of group work

5.5.Bibliography and recommended resources

Basic bibliography

- Guía para la elaboración de estudios del medio físico / [autores Miguel Aguiló Alonso ... (et al.)] . 3ª ed. Madrid : Ministerio de Medio Ambiente, Centro de Publicaciones, 2006
- Conesa Fernández-Vítora, Vicente. Guía metodológica para la evaluación del impacto ambiental / Vicente Conesa Fdez-Vítora ; colaboradores, Vicente Conesa Ripoll [et al.] ; prólogo de María Teresa Estevan Bolea . 3ª ed. rev. y amp., reimp. Madrid [etc.] : Mundi-Prensa, 1997 (reimpr. 2000)
- Gómez Orea, Domingo. Evaluación de impacto ambiental : un instrumento preventivo para la gestión ambiental / Domingo Gómez Orea. 2ª ed. rev. y amp. Madrid [etc.] : Mundi-Prensa, 2003

Complementary bibliography

- Erias Rey, Antonio. Evaluación ambiental y desarrollo sostenible / Antonio Erias Rey, José Manuel Álvarez-Campana Gallo . Madrid : Pirámide, 2007
- Evaluación de impacto ambiental / Alfonso Garmendia Salvador ... [et al.] . reimp. Madrid : Pearson Educacion, 2005 (reimp. 2008)
- Canter, Larry W.. Manual de evaluación de impacto ambiental : técnicas para la elaboración de estudios de impacto / Larry W. Canter ; traducción, Ignacio Español Echániz...[et al.] ; revisión técnica, José Vicente López Alvarez, José María Casillas Barral, Rosa María Gómez Alonso . Madrid [etc.] : McGraw-Hill, D.L. 2000