

## 25230 - Environmental impact assessment

### Syllabus Information

**Academic year:** 2024/25

**Subject:** 25230 - Environmental impact assessment

**Faculty / School:** 201 - Escuela Politécnica Superior

**Degree:** 277 - Degree in Environmental Sciences  
571 - Degree in Environmental Sciences

**ECTS:** 6.0

**Year:** 4

**Semester:** First Four-month period

**Subject type:** Compulsory

**Module:**

### 1. General information

The Environmental Impact Assessment methodology is one of the most typical of Environmental Sciences. Among the objectives of the subject are the knowledge of the regulations and the methods and techniques available, so that the student acquires the ability to undertake an impact assessment. Given the open and partially subjective nature of the methodology, the subject will also address the non-technical circumstances involved in the practice of this discipline.

These approaches and objectives are aligned with some of the Sustainable Development Goals, SDGs, of the Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>) and certain specific goals, contributing to some extent to their achievement: Goal 4 (Objectives 4.4 and 4.7); 9 (Objective 9.4); Goal 15 (Objectives 15.1, 15.2, 15.3, 15.4, 15.5).

### 2. Learning results

- Define and describe the concepts and terms specific to Environmental Impact Assessment.
- Develop the administrative procedure for Environmental Impact Assessment.
- Explain the structure of the inventory of the natural and socioeconomic environment, as well as the most important methodologies to develop them.
- Establish the vulnerability and response capacity of the main biomes to different disturbances or impacts
- Use the different methodologies for impact identification and assessment.
- Review the basic criteria for selecting alternatives.
- Identify the particularities of the environmental impact assessment for the main types of socio-economic projects and activities in our environment, as well as propose the corresponding protective, corrective and compensatory measures.
- Be aware of the conflicts of interest associated with many EIA projects and know how to interact with stakeholders.

### 3. Syllabus

#### Theory program

- Block I. Introduction to the concept of environmental impact assessment
- Block II. Administrative methodology of environmental impact assessment: legal framework
- Block III. Development of the environmental impact study. Methodologies
- Block IV. Environmental impact assessment of major types of projects and activities

#### Practical program:

Project review. The list of projects to be reviewed may include the following:

- EIA of extractive activities
- EIA of dams
- EIA of power lines
- EIA of wind farms
- EIA of linear infrastructures: roads and railroads
- EIA of irrigation transformations

### 4. Academic activities

- **Theory sessions.** Face-to-face activity in which the contents of the proposed topics will be developed. The total duration of this activity throughout the term will be 10 hours.
- **Problem-solving and case studies.** Face-to-face activity in which a cooperative project will be defined and worked

on, and the presentations will be conducted. Various examples of environmental impact assessments related to the main types of projects and activities will be studied (42 hours).

- **Special practices in external facilities** in which an Impact Assessment project will be analysed in situ (8 hours).
- **Study and autonomous work:** during this non-attendance mode, students will dedicate themselves to personal study (87 h).
- **Evaluation tests:** 3 h

## 5. Assessment system

The assessment of this subject will be done by means of a GLOBAL TEST.

The overall test will be composed of the following activities:

### **Activity 1. Written theory exam**

It will include questions of a theoretical-practical nature (short and developmental questions), representative of the global subject matter that has been covered in blocks I, II and III of the theory program. It will be valued that the answers are expressed in a clear and simple way, the argumentation and the technical content are correct. The exam will represent 1/6 of the final grade. In relation to the SDGs, this evaluation activity is related to Objective 4.7.

### **Activities 2 and 3. Written practical exams on examples of environmental impact assessments for the main types of projects and activities**

Activity 2 will consist of a written exam with 10 short questions about the practical program and the practices conducted in external facilities. This will account for 2.5/6 of the final grade. In relation to the SDGs, this evaluation activity is linked to Objectives 4.4, 4.7, 9.4, and 15.1.

Activity 3 will consist of a written test with 5 applied questions based on the case studies covered (1/6 of the final grade). In relation to the SDGs, this evaluation activity is linked to Objectives 15.1, 2, 3, 4, and 5.

### **Activity 4. Collaborative Group Works**

At the beginning of the semester there will be a single assignment (Collaborative Group Work) to be carried out in groups of 3-4 people throughout the term. Exceptionally, in cases where it is not possible to carry out the group work for justified reasons, this work will be individual.

This work will be related to the development of an environmental impact study in an industrial activity and leads to the achievement of a vision on the importance of designing industries to be sustainable, using resources with greater efficiency and promoting the adoption of clean and environmentally sound technologies and industrial processes. In relation to the SDGs, this evaluation activity is related to Objective 9.4.

It will be evaluated through the delivery of a written report and a public presentation of about 10-15 minutes and its subsequent defence. The degree of compliance with the proposed objectives, the procedure developed, the clarity of the presentation and the mastery of the subject matter demonstrated during the defence will be evaluated.

This group work will be evaluated with a 1.5/6 of the final grade of the subject. A minimum grade of 5 out of 10 is required in order to average with the rest of the activities.

There is the possibility to take the Collaborative Group Work evaluation before the date of the global test of the evaluation. This option is recommended by the faculty of the subject.

If any of the activities are passed in the first evaluation period, but the course is failed, the student will keep the grades corresponding to these activities for the second call of the same academic year

### **Success rates in previous years:**

2020/2021	2021/2022	2022/2023
93,94%	80,00%	86,96%

## 6. Sustainable Development Goals

- 4 - Quality Education
- 9 - Industry, Innovation and Infrastructure
- 15 - Life on Land