

Tool III: Environmental Impact Assessment

Code: 106759
ECTS Credits: 6

2025/2026

Degree	Type	Year
Environmental Sciences	OB	3

Contact

Name: Laura Talens Peiro

Email: laura.talens@uab.cat

Teachers

Sergi Miquel Ruiz

Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

It is recommended to have taken and passed the basic subjects of the degree and those related to the natural and socio-economic environment. Specially, students must have taken the subjects 'Sustainable rural and urban planning' and 'Comprehensive Project II: Territorial Management'.

Objectives and Contextualisation

- To know the environmental assessment procedures and the content of mandatory documents.
- To learn on the legislation governing environmental assessments.
- To learn on how to identify and assess environmental impacts.
- Be able to propose measures to mitigate impacts.
- To recognize the main effects of human activities on the natural and social environment.
- To learn how to assess the social perception of environmental impacts.
- To critically analyze an environmental assessment.

Learning Outcomes

1. CM27 (Competence) Assess factors related to the Sustainable Development Goals when undertaking environmental impact studies.
2. CM29 (Competence) Work independently on the resolution of environmental problems and practical cases that require statistical, cartographic or impact analysis.
3. KM37 (Knowledge) Identify the uses of geographic information systems, impact assessment techniques and communication and dissemination methodologies in the environmental field.
4. SM34 (Skill) Collect, analyse, measure and appropriately represent both qualitative and quantitative data, geographic information and observations of environmental impact.
5. SM36 (Skill) Use techniques and materials related to statistical analysis, the preparation of cartographic material and the drafting of environmental impact reports in the classroom and/or laboratory safely and effectively.

Content

Block I: Concepts, regulations and methods.

- Legal framework for environmental impact assessment and strategic environmental assessment
- Procedures, methodology and content of regulated environmental documentation
- Assessment of impacts on the physical, biotic and socio-economic environment

Block II: Application of concepts, regulations and methods to practical cases.

- Analysis of the most important environmental vectors to consider according to the type of project or plan, identification of impacts and applicable environmental measures (preventive, corrective and compensatory)
- Study of linear projects linked to transport (i.e. motorways, train lines)
- Study of renewable energy projects (i.e. solar energy installations, wind energy)

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Classroom practice and problems	11	0.44	SM34, SM36, SM34
Field practice	8	0.32	SM34, SM36, SM34
Seminars	11	0.44	CM29, KM37, SM34, CM29
Theory	20	0.8	CM27, CM29, KM37, CM27
Type: Autonomous			
Personal study time	66	2.64	CM27, CM29, KM37, CM27
Practical work in groups	29	1.16	CM27, CM29, KM37, SM34, SM36, CM27

The subject combines theory classes, classroom practices, seminars, practical work and a field trip.

- (a) Theory classes where the concepts and methods of the discipline are explained. In the theoretical sessions, the complicated and important points of each didactic unit are highlighted and addressed. Subsequently, the student will have to assimilate the concepts explained based on the bibliographic information and with their personal work.
- (b) Classroom practice and problems where the explanation of the basis of the main assessment and evaluation methods will be combined with calculations on the computer through case studies.
- (c) Seminar classes where some aspect of the environmental assessment of specific practical cases will be explored in depth.
- (d) Practical work aimed at knowledge of the processes and documents involved in the environmental assessment.
- (e) Field practice where a trip to the field will be made to observe and discuss the impacts produced by human actions.

Communication with students will be carried out through the subject's Moodle.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continuous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Attendance to trainings and seminars	15	0.5	0.02	CM29, KM37, SM34, SM36
Block I Test	30	2	0.08	CM27, CM29, KM37, SM34, SM36
Block II Test	30	2	0.08	CM27, CM29, KM37, SM34, SM36
Work in groups	25	0.5	0.02	CM27, CM29, KM37, SM34, SM36

Separate evaluations will be carried out for Block I, Block II, the practical work and attendance. Student can approve "per course" (continuous assessment) or in a final "compensatory" test.

The final grade will be calculated according to the following weights, expressed as a percentage:

- Block I test: 30%
- Block II test: 30%
- Practical work in groups: 25%
- Attendance to PCAM, PAUL and SE: 15%

To pass the subject, it is necessary to obtain a grade of no less than 3.5 out of 10 in each of the three parts and an average grade greater than 4.9 out of 10. The format, procedure, and specific content of the evaluation tests for each part will be detailed by the corresponding teacher throughout the course.

The partial exams corresponding to Block I and Block II that are failed (less than 4.9 out of 10) can be recovered in a compensatory test in January. The maximum mark for retaking the midterm exams will not exceed 7 out of 10 points, provided that the student has taken the midterm previously and has been assessed with a minimum of 2/3 of the total grade for the subject.

Students obtain the grade of "Not Evaluable" when the evaluation activities carried out have a weight of less than 67% in the final grade. Attendance at practical sessions, seminars and field trips is mandatory.

The student can request the single assessment. The request for a single assessment implies the waiver of continuous assessment, and involves the delivery of an individual practical work. To request the single assessment, students must submit a reasoned request to the center within the deadlines set in the UAB's administrative academic calendar.

Bibliography

Conesa Fernández-Vitora V (2010) Guía Metodológica para la Evaluación del Impacto Ambiental. Mundi-Prensa. 4^a edició. Madrid.

Domenico, P.A. i F.W. Schwartz (1990). Physical and chemical hydrogeology. Wiley. Fetter, C.W. (1988). Applied hydrogeology. MacMillan.

Fetter, C.W. (1993). Contaminant hydrogeology. MacMillan.

Garméndia, A. (2005) Evaluación de impacto ambiental. Ed Pearson Educación, Madrid, 396p.

Gómez Orea D (2003) Evaluación de Impacto Ambiental, un instrumento preventivo para la gestión ambiental. 2^a edició ampliada. Editorial Mundi-Prensa. Madrid, Barcelona, México, 749p.

Keller, E.A and R.H. Blodgett (2007). Riesgos naturales. Procesos de la Tierra como riesgos, desastres y catástrofes. Pearson.

Mallarach JM (1999) Criteris i mètodes d'avaluació del patrimoni natural. Documents dels Quaderns de medi ambient Núm. 2. Departament de Medi Ambient. Generalitat de Catalunya.

McCarthy, D (1997) Essentials of soil mechanics and foundations. Prentice-Hall.

Rau, J.G. and D. C. Wooten (1980). Environmental Impact Analysis Handbook. McGraw-Hill. Riera, P. (2000) Evaluación de impacto ambiental. Barcelona: Rubes Ed.

Software

There is no specific software.

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
------	-------	----------	----------	------

(PAUL) Classroom practices	1	Catalan	first semester	morning-mixed
(PAUL) Classroom practices	2	Catalan	first semester	morning-mixed
(PCAM) Field practices	1	Catalan	first semester	morning-mixed
(PCAM) Field practices	2	Catalan	first semester	morning-mixed
(SEM) Seminars	1	Catalan	first semester	morning-mixed
(SEM) Seminars	2	Catalan	first semester	morning-mixed
(TE) Theory	1	Catalan	first semester	morning-mixed