Integrated Management Models: Environment

Code: 101843
ECTS Credits: 6

2025/2026

Degree	Type	Year
Prevention and Integral Safety and Security	OB	3

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Teaching groups languages

You can view this information at the end of this document.

Prerequisites

There are no requirements for this subject.

Objectives and Contextualisation

Introduction:

The environment and natural resources are a common good of all humanity, both current and future. For this reason, both the society in general and the companies in particular have to take responsibility for the impact that we cause on the environment. This principle must be extended to all organizations and especially those that, due to their activity, may have a negative impact on the environment.

At present, we have several tools for environmental management in companies, including environmental management systems (ISO 14.001, EMAS, etc.) and the ecological labeling of more respectful products and services, such as systems of responsibility and sustainable development. These tools, voluntary but of a public nature, are based on the principle of continuous improvement of environmental management.

The concept of an integrated environmental management system is intimately linked to that of environmental and quality auditing. This could be defined as 'an organizational structure, planning of activities, responsibilities, practices, procedures, processes and resources to develop, implement, carry out and keep up to date the environmental policy of a company'. Moreover, policies and the economic context are driving private and public entities to implement circular economy strategies in order to get on the loop and be innovative in the new economic paradigm, where resources, products and services will have to last much

1

longer within the system and consumption patterns will have to be much more responsible. The subject then will introduce the basic concepts and strategies of the circular economy as a tool for environmental management and business strategy.

This subject will present the basic tools for environmental management and introduce circular economy for organizations, both public and private.

Objectives:

- Introduce general aspects about the environment and sustainable development.
- Describe the general concepts about organizational environmental management systems and products.
- Know the norm ISO 14001 and European eco-audits following the EMAS regulation.
- Apply different procedures necessary for the practical implementation of an environmental management and audit system based on specific cases.
- To introduce the concept and strategies of circular economy as a management tool for private and public companies.
- To enhance students' critical thinking skills and proactive identification of environmental aspects which may be at risk within a company.

Competences

- Be able to communicate efficiently in English, both orally and in writing.
- Carry out analyses of preventative measures in the area of security.
- Identify the resources necessary to respond to management needs for prevention and integral security.
- Know how to communicate and transmit ideas and result efficiently in a professional and non-expert environment, both orally and in writing.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Respond to problems applying knowledge to practice.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Take account of social, economic and environmental impacts when operating within one's own area of knowledge.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.
- Use the capacity for analysis and synthesis to solve problems.
- Work in institutional and interprofessional networks.

Learning Outcomes

1. Analyse indicators of sustainability for academic and professional activities in the area including social, economic and environmental considerations.
2. Analyse the preventative interventions in matters of security, environment, quality and social corporate responsibility and identify the inherent risk factors.
3. Analyse the situation and identify the points that are best.
4. Be able to communicate efficiently in English, both orally and in writing.

5. Evaluate how gender stereotypes and roles affect professional practice.
6. Identify the resources necessary for managing security, the environment, quality and social corporate responsibility.
7. Identify the social, economic and environmental implications of the academic and professional activities in the field of self-knowledge.
8. Know how to communicate and transmit ideas and result efficiently in a professional and non-expert environment, both orally and in writing.
9. Propose means of evaluating projects and actions for improving sustainability.
10. Propose new methods or well-founded alternative solutions.
11. Propose viable projects and actions that promote social, economic and environmental benefits.
12. Respond to problems applying knowledge to practice.
13. Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
14. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
15. Students must be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.
16. Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
17. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
18. Use the capacity for analysis and synthesis to solve problems.
19. Work in institutional and interprofessional networks.

Content

Theme 1. Introduction to environment and environmental management
Environment and sustainable development
Business and the environment
Environmental strategy in business
Environmental management instruments

Theme 2. Environmental management at the organisational level
Basic concepts
Motivations and advantages
Options for implementing an EMS
Actors involved
Stages of implementation
Economic assessment

Theme 3. Environmental Product Management
Introduction
Ecodesign
Environmental communication (eco-labels, greenwashing, good practices, etc.)
Circularity against disposable plastics.

Theme 4. Introduction to the circular economy as a strategic business management tool.
Introduction to the concept of circular economy
Legislative context: EU, Spain and Catalonia (Spain 2030 Strategy, draft law on climate change and energy transition, law on waste and contaminated soils, etc.).
Circular economy principles and strategies (industrial symbiosis, servitisation, waste to resource, repair, maintenance, eco-design, etc.).
The role of public administration as a promoter of circular territories.
Case studies applied to private and public companies.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Theoretical classes: Master Classes in group. Practical classes: Resolution of cases with the student's active participation	44	1.76	
Type: Supervised			
Follow-up tutorials for group work: teacher supervision, Presentations in the classroom by the students. Debate and discussion around the exposed material.	12	0.48	
Type: Autonomous			
Resolution of practical cases: individual resolution of exercises proposed by the teacher. Group work: practical cases worked in groups. Personal study: personal work of knowledge consolidation, scheduled readings, etc.	94	3.76	

Teaching language: Catalan

The theoretical classes in the classroom will combine the lectures, which will occupy most of the time, and the development and resolution of work exercises, usually individual or in pairs.

The practical classes in the classroom, divided into two groups, will consist of the development of exercises and group work, in which some of the concepts presented in the theoretical classes will be applied to practice. Subsequently a pooling will be carried out from which the corresponding academic conclusions were drawn.

The autonomous activities correspond to both the personal study and the resolution of the exercises and work proposed by the teacher. Each student should investigate documentation of topics related to the subject matter of study and personal consolidation work on what is exposed in class (scheduled readings, individual exercises). In addition, you should monitor and study different exercises and case studies.

The evaluation activities will evaluate the knowledge and competences acquired by the students, according to the criteria presented in the following section.

Tutorials with the faculty will be arranged by email.

Classe will be done in Catalan.

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

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes

Written and oral tests	50%	0	0	1, 3, 4, 8, 12, 2, 6, 7, 9, 10, 11, 17, 16, 15, 13, 14, 19, 18, 5
Continuous assessment tests	15%	0	0	1, 3, 4, 8, 12, 2, 6, 7, 9, 10, 11, 17, 16, 15, 13, 14, 19, 18, 5
Exercises and problems	35%	0	0	1, 3, 4, 8, 12, 2, 6, 7, 9, 10, 11, 17, 16, 15, 13, 14, 19, 18, 5

1. Continuos Evaluation

The course evaluation system is continuous, The minimum average grade to pass is a 5.

At the same time, in accordance with the regulations of the UAB: "Without prejudice to other disciplinary measures that are deemed opportune, and in accordance with the current academic regulations," should the student carry out any irregularity that may lead to a Significant variation of the qualification of an evaluation act, this evaluation act will be classified with a 0, regardless of the disciplinary process that can be instructed. In case there are several irregularities in the evaluation acts of a same subject, the final grade of this subject will be 0". In all the documents to be delivered and exercises to be developed, the formal expression of the students will be valued, including editorial aspects, spelling and communicative ability.

Written and oral tests that allow to assess the knowledge acquired by the student (50%)

There will be a theoretical test type that equals 40% of the grade of the subject (incorrect answers punish). It is a requirement to take at least 3.5 in this exam to average the remaining marks of the subject (that is, for the student to obtain an 'evaluable' note).To take the final exam, it is necessary that the student has taken 2/3 parts of the continuous assessment of the subject.

Each correct answer sum +1point and each incorrect answer substracts 1/3 points.

Delivery of exercises and problems (35%)

Throughout the course, there will be a total of 5 practical classes, each of which will be evaluated with the delivery of an exercise and / or presentation in class. Each one of the practices is equivalent to 8% of the final grade. The different practical sessions correspond to:

- Practical 1. Initial environmental evaluation.

- Practice 2. Identification of environmental aspects.

- Practice 3. Environmental management program.

- Practice 4 Presentation practical exercise SGA (practices 1, 2 and 3).

- Practice 5. Case study review and essay in regards with circular economy.

At least it is a requirement to get an average mark of 4 out of the 5 practices.

Partial evaluation (15%)

During the subject, 4 individual tests (~ 10 minutes) will be carried out about the contents presented in previous sessions. These tests will count up to 20% of the mark (therefore, each of them will be worth 5%). If not submitted, mark will be considered as 0. There is no minimum mark.

If the exam, is a test exam, it could be:

- double alternative test.

- multiple choice test.

If there is no justified cause (absence note must be submitted) and students cannot attend partial exams, they will not be recoverable and therefore marks will be considered as 0.

Contents of these exams are not discarded for the final exam.

2. Unique Evaluation

Students who opt for the single assessment will take a final synthesis test of all the content of the subject (50%) and will deliver the subject work (50%).

The date for this test and the delivery of the course work will be the same scheduled in the schedule for the last continuous assessment exam. The same recovery system will be applied as for the continuous evaluation.

3. Evaluation of students in the second call or more

Students who repeat the subject must complete the scheduled tests and exams and hand in the subject's work on the dates indicated in the Moodle classroom.

4. Recovery final test:

The student who does not exceed the subject, that is, does not reach an average grade of 5 out of 10, or has obtained a "non-evaluable" (which are those cases that have not reached 3.5 in the "theoretical exam or the average mark of the practices), may be submitted to the final exam of the total of thesubject. This exam will consist of an evaluation test in which all the contents of the subject will be revalued. The mark obtained in this exam will be the mark of the subject. To take the make-up exam, it is necessary that the student has taken 2/3 parts of the continuous assessment of the subject

The use of a laptop in classrooms will be allowed in certain sessions (the teacher will inform when its use is possible and / or recommended).

If you do not pass the subject in accordance with the aforementioned criteria (continuous assessment), you can do a recovery test on the scheduled date in the schedule, and that will cover all the contents of the program (theory and practice).

To participate in the recovery, students must have been previously evaluated in a set of activities, the weight of which is equivalent to a minimum of two thirds of the total grade of the subject. However,the qualification that will appear on the student's file is of a maximum of 5-Approved.

Each correct answer sum +1point and each incorrect answer substracts 1/3 points.

Students who need to change an evaluation date must submit the application by filling in the document that will be found in the EPSI Tutorials moodle.

Tests / exams may be written and / or oral at the discretion of the teaching staff.

5. Change of date of a test or examination

Students who need to change an assessment date must submit the request by completing the document found in the EPSI Tutoring Moodle space.

Once completed, the document must be sent to the teaching staff of the subject and to the coordination of the Degree.

6. Review

At the time of carrying out each assessment activity, the teaching staff will inform the students of the mechanisms for reviewing the qualifications.

For single assessment students, the review process will be the same.

7. Other considerations

Without prejudice to other disciplinary measures deemed appropriate, and in accordance with current academic regulations, "in the event that the student commits any irregularity that may lead to a significant variation in the grade of an assessment act , this assessment act will be graded with a 0, regardless of the disciplinary process that may be instituted. In the event that several irregularities occur in the assessment acts of the same subject, the final grade for this subject will be 0".

If there are unforeseen circumstances that prevent the normal development of the subject, the teaching staff may modify both the methodology and the assessment of the subject.

If during the correction there are indications that an activity or work has been done with answers assisted by artificial intelligence, the teacher can complement the activity with a personal interview to corroborate the authorship of the text.

If during the correction there are indications that an activity or work has been carried out with answers assisted by artificial intelligence, the teacher may complement the activity with a personal interview to corroborate the authorship of the text.

8. Permitted Use of Artificial Intelligence (AI):
In this course, the use of Artificial Intelligence (AI) technologies is permitted as an integral part of the development of the work (interim reports and final report), provided that the final result reflects a significant contribution from the student in terms of analysis and personal reflection. The student must clearly identify which parts have been generated using this technology, specify the tools used, and include a critical reflection on how these tools have influenced the process and the final outcome of the activity. Lack of transparency in the use of AI will be considered a breach of academic honesty and may result ina penalty to the activity grade or more severe sanctions in serious cases.

Bibliography

1. Basic bibliography (mandatory)

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Hillary R (2002). ISO 14001: Experiencias y casos prácticos. AENOR: Madrid.

Lamprecht, JL (1997) ISO 14000. Directrices para la Implantación de un Sistema de Gestión Medioambiental. AENOR. Madrid.

2020 EU Action Plan for Circular Economy:

https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_1&fo

Observatorio de Economía Circular - COTEC:

https://cotec.es/observacion/economia-circular/f62c16db-5823-deb4-7986-a786e5c3401c

2. Optional Bibliography:

Kirchherr J. et al. 2017. Conceptualizing the circular economy: An analysis of 114 definitions. Resources, Conservation and Recycling 127, 221-232. http://dx.doi.org/10.1016/j.resconrec.2017.09.005.

Kowszyk, Y., & Maher, R. (2018). Estudios de caso sobre modelos de Economía Circular e integración de los Objetivos de Desarrollo Sostenible en estrategias empresariales en la UE y ALC. Hamburgo: Fundación EU-LAC.

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Enlaces web:

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Empresa y Evaluación Ambiental. Departamento de Territorio y Sostenibilidad. Generalidad de Cataluña. http://www20.gencat.cat/portal/site/dmah/menuitem.685af0bd03466a424e9cac3bb0c0e1a0/?vgnextoid=4977531

Environmental Management Systems. US Environment Protection Agency

http://www.epa.gov/ems/

EU Eco-Management and Audit Scheme (EMAS) http://ec.europa.eu/environment/emas/index_en.htm

Instituto Internacional de Desarrollo Sostenible: la empresa y el desarrollo sostenible

http://www.iisd.org/business

Integrated Product Policy (IPP)

http://europa.eu/legislation_summaries/consumers/consumer_safety/l28011_en.htm

International Organisation for Standardization (ISO)

http://www.iso.org

Medio Ambiente. Universidad Autónoma de Barcelona (UAB)

http://www.uab.cat/mediambient/

Serie ISO 14000 y Sistemas de Gestión Ambiental: una base para la sostenibilidad

http://www.trst.c

https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_2&f

Ellen MacArthur Foundation: https://www.ellenmacarthurfoundation.org

Software

No specific software is used.

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
(TE) Theory	1	Catalan	first semester	afternoon
(TE) Theory	2	Catalan	first semester	afternoon