

COURSE GUIDE

2025/26

Faculty345 - Faculty of Engineering - Bilbao

DegreeDIPRO13a - Master in Project Management

Cycle.

Year.

COURSE

504899 - Sustainability

Credits, ECTS:3

COURSE DESCRIPTION

Sustainability is a challenging concept for many project-based organizations, but it is something project professionals are thinking about more than before. Project professionals have a responsibility to ensure that their work minimizes, or ideally positively affects, ongoing sustainability. In projects, sustainability remains significant and important; in fact, it is a fundamental competence vital for improving and facilitating effective project, programme and portfolio management. The formal definition for sustainable project management by Gilbert Silvius and Others is: "the planning, monitoring, and controlling of project delivery and support processes, with consideration of the environmental, economical, and social aspects of the life-cycle of the project's resources". Therefore, it is important for all project professionals to understand this concept. Change initiatives must proactively alter behaviors so that they can be delivered through sustainable working practices and methods. Importantly, sustainability requires balancing between four key concerns: the environment, society, the economy, and administration. When these four elements are considered, we can integrate sustainability into projects.

There are several tools and techniques that can be applied for sustainable project management:

- Sustainability Matrices: Evaluate and compare different design and execution options based on sustainability criteria (Sustainability Canvas model).
- Stakeholder Management: Involve all interested parties to ensure compliance with sustainable objectives.
- Performance Indicators: Use specific indicators to monitor and report the environmental and social performance of the project.

The integration of sustainability into the basic pillars of Project Management is the MAIN OBJECTIVE of this lecture. For this purpose, we will focus in:

- The Project Manager and aspects of People, Planet and Profit in the design and execution of all phases of the project.

Sustainability in project management, 5P model.

- Sustainability maturity model for project and organization according to Silvius et al.
- Sustainability Canvas model and real case applications.

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

COMPETENCIAS DE LA ASIGNATURA

Apply the theories of product design and its life cycle

To apply and develop the tools and techniques used for the sustainable management of projects

RESULTADOS DE APRENDIZAJE DE LA ASIGNATURA

The student who successfully completes this subject should be able to:

- Understand why sustainability is important for Project Management.
- Know the basic concepts of sustainability: Triple Baseline, Sustainability Reporting, Life Cycle.
- Apply the sustainability impact assessment of a specific project.
- Propose mitigation measures for the possible negative impacts of a project.

Theoretical and Practical Contents

Sustainability concepts. 17 Sustainable development goals. Responsible Project Management. 5 P model.

Standards for Sustainability according to PMP Book.

How may Project Management support sustainability? Green Project Management. Sustainable Project Management initiatives: sustainability maturity models

Sustainability Cavans model

Application to sustainability canvas model to real cases in industry.

METODOLOGIA (ACTIVIDADES FORMATIVAS)

Actividad Formativa	Hours	Porcentaje presencialidad
Exercises	10	10 %
Groupwork	20	10 %
Expositive classes	45	33 %

TYPES OF TEACHING

Types of teaching	M	S	GA	GL	GO	GCL	TA	TI	GCA
Hours of face-to-face teaching	15	15							
Horas de Actividad No Presencial del Alumno/a	15	30							

Legend: M: Lecture-based S: Seminar GA: Applied classroom-based groups
GL: Applied laboratory-based groups GO: Applied computer-based groups GCL: Applied clinical-based groups
TA: Workshop TI: Industrial workshop GCA: Applied fieldwork groups

Evaluation tools and percentages of final mark

Denominación	Ponderación mínima	Ponderación máxima
Attendance and participation	10 %	40 %
Written examination	10 %	30 %
Practical tasks	10 %	50 %
Writing up the teamwork	10 %	50 %

ORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

The assessment of the subject is carried out continuously throughout the course. The following factors are taken into account in the grading of the course:

Attendance (10%): Although attendance is not compulsory, it is highly recommended due to the contents developed in the classroom. For this reason, attendance forms part of the calculation of the final grade.

Individual assignments (25%): Students must hand in an assignment designated at the beginning of the course. The work will be handed in by uploading it to egela within the defined deadlines. In order to pass the course, the work must have obtained a grade higher than 5 out of 10.

Team work (50%): At the beginning of the course, students will be assigned to work teams of between 3 and 6 people.

Teamwork in this class is considered very relevant and therefore has a significant importance in the evaluation of students. Each team will have to hand in a designated piece of work at the beginning of the course. The work will be handed in by uploading it to egela on the defined deadlines. If the timetable allows it, the work will also be defended orally. In order to pass the course, the work must have obtained a grade higher than 5 out of 10.

Exam (15%): As in the certification exams of the professional associations of project management, the exam will be in the form of a multiple-choice test. In order to pass the course, the work must have obtained a grade of more than 4 out of 10. The grade for the course will be obtained by applying the corresponding weight to each of the factors (attendance, individual work, team work, exam).

If any of the work (individual or team work) has not passed the established cut-off mark, the final mark for the course will be No Show.

If the exam mark is lower than 4.0, the final mark for the course will be that corresponding to the exam mark.

If the student decides to waive the Continuous Assessment of this subject, he/she must communicate it in writing before the deadline for the submission of the individual work. This date can be found in the Student Guide available on the eGela platform.

In this case, in order to pass the course, the student will be assessed by means of a written exam that may contain additional questions to those posed in the exam to which students who are assessed on a continuous basis are submitted and which will include all the contents studied throughout the four-month period corresponding to the exam. This assessment will be completed with an oral exam which will take place on the same day as the written exam, by prior appointment for students registered for this exam. In the oral exam, students will be asked about the contents studied in the classroom, as well as about the activities carried out during the corresponding four-month period. In order to pass the course, students must pass both tests.

In the event that health conditions prevent the completion of a teaching activity and/or face-to-face assessment, a non-face-to-face modality will be activated, of which students will be promptly informed (applicable to all exams: ordinary, extraordinary and advance).

EXTRAORDINARY EXAMINATION PERIOD: GUIDELINES AND OPTING OUT

Those who have to sit the extraordinary call will do so in the same way as they did in the ordinary call. In other words, those who took the continuous assessment will complete the tests (individual work, team work, exam) that they did not pass in the ordinary call.

The grade for the course will be obtained by applying the corresponding weight to each of the factors (attendance, individual work, team work, exam).

If any of the work (individual or team work) has not passed the established cut-off mark, the final mark for the course will be No Show.

If the exam mark is lower than 4.0, the final mark for the course will be that corresponding to the exam mark.

Those who waive the continuous assessment, will be submitted to a written and oral exam as described in the previous section (Ordinary call: orientations and waiver).



MANDATORY MATERIALS

The course is managed through the egela platform. Here the student will find the slides used in class and other help materials. The statements of individual and team assignments will also be found there, and where to upload them.

BIBLIOGRAPHY

Basic bibliography

Kerzner, H.; Project Management: A systems approach to planning, scheduling and controlling. Ed. John Wiley, 2003.
Project Management Institute A Guide to the Project Management Book of Knowledge, Project Management Institute. 2013.

Detailed bibliography

Gareis, R., Huemann, M., Martinuzzi, A. 2011. What can project management learn from considering sustainability principles?. Project Perspectives 33.

Silvius, G. (2012). Change the Game: Sustainability in Projects and Project Management. Green Business Process Management.

Journals

International Journal of Project Management
Project Management Journal
Journal of Cleaner Production

Web sites of interest

www.pmi.org (2021)
www.ipma.ch (2021)
<https://www.greenprojectmanagement.org/>