

COURSE GUIDE2025/26

Faculty345 - Faculty of Engineering - Bilbao

DegreeDIPRO13a - Master in Project Management

Cycle.

Year.

COURSE

504903 - Risk management

Credits, ECTS:3

COURSE DESCRIPTION

The aim of this subject is to deepen the knowledge of what a risk is, the possibility of loss, destruction or gain. For this purpose, the methods and tools of risk management are studied.

In the same way, methods for establishing and implementing strategies for risk management in projects are presented.

COMPETENCIES/LEARNING RESULTS FOR THE SUBJECT

COMPETENCIAS DE LA ASIGNATURA

Apply the knowledge of the processes and tools that define the theoretical foundations of the different areas of technical knowledge of the discipline of project management

Develop project proposals using the processes and tools that define the theoretical foundations of the different areas of technical knowledge of the project management discipline

To develop the organizational and management capacity for an efficient project management, using the theoretical and technical tools of the project discipline

RESULTADOS DE APRENDIZAJE DE LA ASIGNATURA

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

- Identify the expected risks in the management of a project.
- Draw up a risk management plan, including contingency plans.
- Use software tools applied to risk management planning.

Theoretical and Practical Contents

Plan Risk Management

Identify Risks

Perform Qualitative Risk Analysis

Perform Quantitative Risk Analysis

Plan Risk Responses

Monitor Risks

PRM Software Overview

METODOLOGIA (ACTIVIDADES FORMATIVAS)

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

TYPES OF TEACHING

Types of teaching	M	S	GA	GL	GO	GCL	TA	TI	GCA
Hours of face-to-face teaching	10		15		5				
Horas de Actividad No Presencial del Alumno/a	15		15		15				

Legend:

M: Lecture-basedS: SeminarGA: Applied classroom-based groups

GL: Applied laboratory-based groupsGO: Applied computer-based groupsGCL: Applied clinical-based groups

TA: WorkshopTI: Industrial workshopGCA: Applied fieldwork groups

Evaluation tools and percentages of final mark

Denominación	Ponderación mínima	Ponderación máxima
Attendance and participation	10 %	30 %
Written examination	20 %	40 %
Practical tasks	30 %	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 (20%): 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 (50%): 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.

Exam (30%): 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, exam).

If the 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, exam).

If the 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 transparencies used in class and other help materials. The statements of individual and team assignments will also be found there, and the places 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

Schuyler J., "Risk and decision analysis", PMI, 2001

Montes J.M., Evaluación de proyectos y análisis de riesgo. Fundación Gómez Pardo, Madrid. 1979.

Kliem, R.L., Ludin I.S., Reducing Project Risk. Gower Publishing. 1997.

Albert, K.J. The Strategic Management handbook?. McGraw-Hill, Nueva York. 1983.

Baker, A. J. Bussiness Decision Making, Crom Helm. Londres. 1981.

Cooper, D. Y Chapman, C., Risk Analysis for Large Projects, Wiley, Nueva York. 1987.

Gómez Bezares ,F., Métodos cuantitativos de gestión, Ibérico Europea de Ediciones, Madrid. 1985.

ITGE, Manual de Evaluación Técnico-económica de proyectos Mineros de Inversión. 1997.

Journals

International Journal of Project Management
Project Management Journal

Web sites of interest

<https://www.pmi.org/> (2021)
<http://www.ipma.world/> (2021)