



UNIVERSIDAD
DE MURCIA

1. Identification

1.1. About the course

Academic Term	2025/2026
Degree	MÁSTER UNIVERSITARIO EN GESTIÓN DE RIESGOS EN LAS ORGANIZACIONES
Course	MEDIO AMBIENTE, CAMBIO CLIMÁTICO Y TRANSICIÓN ENERGÉTICA
Code	6813
Year	PRIMERO
Course type	OBLIGATORIA
Number of groups	2
ECTS	3.0
Estimation of workload	75.0
Timeline	1º Cuatrimestre
Languages	English, Spanish

1.2. Teaching staff

DE LA TORRE PALACIOS, LUIS

Professor: SEMIPRESENCIAL 1, RISK MANAGEMENT / INGLÉS

Group coordination: SEMIPRESENCIAL 1, RISK MANAGEMENT / INGLÉS

Course coordinator

Category

CA

Area

There are no records

Department

There are no records

2. Presentation

The objective of this course is to introduce students to the basic concepts and evolution of such an urgent and worrying problem for society as climate change and its effects. The risks posed by global warming, as well as those posed by its transitional phase, need to be understood and analyzed at different levels within society.

Starting from the source of the problem, greenhouse gases, we must be able to understand that global warming brings with it a series of physical and transitional risks that will accompany society, and in particular companies and capital providers, at least until decarbonization is complete.

Legislation, which is extensive but not overly complex, guides action towards climate neutrality from the international to the national and even the local level. Today's and tomorrow's professionals must have a convincing discourse in this regard, as well as to understand the milestones that society expects.

Climate risks, their attention and their communication within the expected frameworks are fundamental to addressing a problem, that of climate change, which due to its complexity, impact and depth, interacts in different areas such as society, politics, economy, technology and international relations.

Within a sustainability report, it is necessary to be able to understand the specific headings related to climate change and transition and to integrate the related information in a structured way in a clear and attractive document.

3. Conditions of access to the course

3.1. Incompatibilities

There are no records

3.2. Requirements

There are no records

3.3. Recommendations

None.

4. Competencies

4.1. Basic competencies

- CB6: Poseer y comprender conocimientos que aporten una base u oportunidad de ser originales en el desarrollo y/o aplicación de ideas, a menudo en un contexto de investigación
- CB7: Que los estudiantes sepan aplicar los conocimientos adquiridos y su capacidad de resolución de problemas en entornos nuevos o poco conocidos dentro de contextos más amplios (o multidisciplinares) relacionados con su área de estudio
- CB8: Que los estudiantes sean capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios
- CB9: Que los estudiantes sepan comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan a públicos especializados y no especializados de un modo claro y sin ambigüedades
- CB10: Que los estudiantes posean las habilidades de aprendizaje que les permitan continuar estudiando de un modo que habrá de ser en gran medida autodirigido o autónomo.

4.2. Degree competencies

- CG1: Establecer un sistema de evaluación y gestión de riesgos en diferentes organizaciones.
- CG4: Capacidad para analizar y evaluar las limitaciones impuestas por el regulador a la adopción de riesgos.
- CG5: Capacidad para tomar decisiones, desde la ética profesional, en el ámbito de la gestión de riesgos.
- CE13: Capacidad para identificar los riesgos que supondrá el cambio climático.
- CE14: Capacidad para informar de cuestiones clave de la transición energética.

4.3. Transversal and course competencies

There are no records

5. Contents

5.1. Theoretical contents

Theme 1: ORIGIN OF CLIMATE CHANGE RISK

Greenhouse Gases.

Energy transition and fuels.

Theme 2: THE OVERALL FRAMEWORK SOLUTION

2015 Paris Agreements and regulatory development for the fulfillment of the 20-30 goals.

Consensus and participation are necessary for the implementation of the legal framework and compliance with global goals.

Theme 3: THE FINANCIAL REGULATORY SOLUTION

Requirements of the legal framework for financing environmental risks and decarbonization.

Theme 4: THE SOLUTION AS FINANCIAL MOBILIZATION

Mobilization of resources for the fight against climate change and energy transition.

Theme 5: THE SOLUTION AS SPANISH REGULATORY POLICY

Public sector commitment to the fight against climate change.

Environmental tax reform.

Regulatory uniformity.

Theme 6: THE SOLUTION AS A PLANNING POLICY

Energy transition objectives and planning.

Energy and climate plans.

Theme 7: GLOBAL PRACTICAL SOLUTIONS

Decarbonization transition initiatives.

Climate governance.

Theme 8: THE SOLUTION FROM THE HAND OF TECHNOLOGY

Renewable Energies.

Energy networks.

Technology neutrality criteria.

Mobility and building.

Theme 9: RISKS AND THEIR PERCEPTION

The risks of clean energy.

Factors of vulnerability to the effects of climate change.

Theme 10: SPHERES OF ACTION OF THE COMPANY

Spheres of action in business and public administration.

5.2. Practical contents

■ Practical activity 1: Final case study

Analysis of case studies in terms of subject matter and content. The case can be of any content.

Related to:

- Theme 1: ORIGIN OF CLIMATE CHANGE RISK
- Theme 2: THE OVERALL FRAMEWORK SOLUTION
- Theme 3: THE FINANCIAL REGULATORY SOLUTION
- Theme 4: THE SOLUTION AS FINANCIAL MOBILIZATION
- Theme 5: THE SOLUTION AS SPANISH REGULATORY POLICY

- Theme 6: THE SOLUTION AS A PLANNING POLICY
- Theme 7: GLOBAL PRACTICAL SOLUTIONS
- Theme 8: THE SOLUTION FROM THE HAND OF TECHNOLOGY
- Theme 9: RISKS AND THEIR PERCEPTION
- Theme 10: SPHERES OF ACTION OF THE COMPANY

6. Training activities

Training Activity	Methodology	Hours	In-person
AF1: Exposición Teórica / Clase Magistral	Classroom activities. Face-to-face sessions, either in the classroom or via videoconferencing, where lecturers present the content of the subject using the teaching resources available.	14.0	100.0
AF2: Seminarios / Aprendizaje orientado a proyectos / Estudios de Casos. Exposición y Discusión de Trabajos	<p>Practical teaching, carried out by teachers in the classroom or virtually, where activities require the active participation of students, such as preparing and presenting reports, solving cases, etc.</p> <p>Learning based on case and problem analysis: Monitoring and evaluation by the teaching staff throughout the course of the student's practical work, carried out individually or in groups, in which the knowledge, methods and techniques acquired during the course are practised.</p>	10.0	100.0
AF3: Trabajo autónomo del estudiante	Directed autonomous learning. The lecturer will propose theoretical and practical questions for the students to solve using the recommended bibliography and materials, which will then be analysed.	49.0	0.0
AF4: Tutorías individualizadas o en grupo.	Individual or group tutorials. Individual exchange sessions to help students complete the subject.	2.0	0.0
Total		75.00	

7. Course schedule

<https://www.um.es/web/estudios/masteres/gestion-riesgos-organizaciones/2025-26#horarios>

8. Assessment svstems

Identifier	Name of the assessment tool	Assessment criteria	Weighting
SE1	. Participación y aportaciones a discusiones teóricas y casos prácticos realizados en clase de manera individual o en grupo.	SE1 This section assesses students' attention, willingness to learn, the quality of their comments and questions in class, as well as their participation and presentation of ideas generated in the case studies and exercises during class. To assess students' monitoring, attention and willingness to learn, attendance at videoconferences, participation in videoconferences through the use of tools such as chat, and completion of activities within the deadlines specified in each assignment will be assessed.	20.0
SE2	Pruebas escritas (Exámenes). Pruebas objetivas, de desarrollo, de respuesta corta, de ejecución de tareas, de escala de actitudes realizadas por los alumnos para mostrar los conocimientos teóricos y prácticos adquiridos.	SE2 The exam may consist of theoretical questions and/or exercises and may be either a test or a development or calculation exam. The exam will cover the theoretical-practical content of the subject as reflected in the syllabus and basic bibliography, as well as the concepts and ideas covered in lectures.	40.0
SE3	Informes escritos, casos prácticos, trabajos, caso práctico final.	SE3 The resolution of an activity proposed to the students will be assessed in this section. This resolution must be individual in nature and, of course, an original work of the student. A good analysis and identification of the problem, its solution and conclusions, the use of specific terms of the subject and the format and quality of the presentation will be positively evaluated. The group and/or individual practical activities will be carried out in the virtual classroom according to the criteria established during the course.	40.0

9. Exam dates

<https://www.um.es/web/estudios/masteres/gestion-riesgos-organizaciones/2025-26#exámenes>

10. Learning outcomes

- 10.1. Identify the current situation and regulatory framework for environmental and energy risks.
- 10.2. Apply existing financial and tax regulations related to environmental risks in organizations.
- 10.3. Analyze and address the risks associated with clean and renewable energy and their impact on the energy transition.
- 10.4. Identify key resources and issues related to climate change governance and current plans to address climate change.

11. Bibliography

Group: SEMIPRESENCIAL 1

Basic bibliography

There are no records

Further reading

- Technical notes given by the professor to the students.

Group: RISK MANAGEMENT / INGLÉS

Basic bibliography

There are no records

Further reading

There are no records

12. Remarks

The mark corresponding to the SE1 assessment instrument will be retained for the two academic calls of the current academic year.

The student who does not take the exam will be recorded as a 'no-attendance' on the official transcript, even if he/she has obtained a mark in the other assessment instruments.

The mark corresponding to the SE2 assessment instrument will be retained for the two academic calls of the current academic year and may be recovered if the mark is lower than 5 out of 10.

The mark corresponding to the assessment tool SE3 is recoverable.

The mark corresponding to the assessment instrument SE3 will be kept for the two academic calls of the current academic year.

The training actions (AF) for the hybrid modality are listed below:

AF HYBRID	Hours	Presential
AF1: Theoretical exposition. Master class	6	100%
AF2: Seminars / Projectoriented learning / Case studies. Exhibition and discussion of work	2,5	100%
AF3. Autonomous student work (studying the material, reading the support material, watching videos, carrying out case studies, etc.)	62,5	0%
AF4. Individual or group tutoring	3	0%
AF5: Opinion Forums	1	0%

SPECIAL EDUCATIONAL NEEDS

Those students with disabilities or special educational needs may contact the Service of Attention to Diversity and Volunteering (ADYV - <https://www.um.es/adyv>) to receive guidance on better use of their training process and, where appropriate, the adoption of measures of equalization and improvement for inclusion, under the Rectoral Resolution R-358/2016. The treatment of information about this student body, in compliance with the LOPD, is strictly confidential.

STUDENT EVALUATION REGULATIONS

Article 8.6 of the Student Evaluation Regulation (REVA) provides that "except in the case of activities defined as compulsory in the teaching guide, if the student is unable to follow the continuous evaluation process due to duly justified supervening circumstances, he/she shall be entitled to take a global test".

It is also recalled that Article 22.1 of the Student Evaluation Regulations (REVA) stipulates that "the student who uses fraudulent conduct, including the improper attribution of identity or authorship, or is in possession of means or instruments that facilitate such conduct, will obtain a grade of zero in the evaluation procedure and, where appropriate, may be subject to sanction, after opening disciplinary proceedings".