English version at the end of this document

Ano Letivo	2022-23
Unidade Curricular	BASES TEÓRICAS E PRÁTICAS PARA AVALIAÇÃO DE RISCO
Cursos	RISCOS COSTEIROS, IMPACTOS DAS ALTERAÇÕES CLIMÁTICAS E ADAPTAÇÃO - COASTHazar (2º CICLO) ERASMUS MUNDUS
Unidade Orgânica	Faculdade de Ciências e Tecnologia
Código da Unidade Curricular	19391002
Área Científica	CIÊNCIAS DA TERRA
Sigla	
Código CNAEF (3 dígitos)	443
Contributo para os Objetivos de Desenvolvimento Sustentável - ODS (Indicar até 3 objetivos)	11 13
Línguas de Aprendizagem	English

Modalidade de ensino

Face to face

Docente Responsável

Óscar Manuel Fernandes Cerveira Ferreira

DOCENTE	TIPO DE AULA	TURMAS	TOTAL HORAS DE CONTACTO (*)

* Para turmas lecionadas conjuntamente, apenas é contabilizada a carga horária de uma delas.

ANO	PERÍODO DE FUNCIONAMENTO*	HORAS DE CONTACTO	HORAS TOTAIS DE TRABALHO	ECTS
1º	S1	30T; 20TP	125	5

* A-Anual;S-Semestral;Q-Quadrimestral;T-Trimestral

Precedências

Sem precedências

Conhecimentos Prévios recomendados

Not applicable

Objetivos de aprendizagem (conhecimentos, aptidões e competências)

To understand and be able to make an appropriate use of the fundamental concepts to be applied in risk assessment
To identify the different approaches, methods and tools to be used in risk assessment studies
To be able to assess and quantify the different risk levels
To learn the problems in decision making in a risk framework.

Conteúdos programáticos

Content Sessions
1.- Basic notions of risk 1 week
2.- Economics of risk 2 weeks
3.- Hazard and impacts 1 week
4.- Exposure 1 week
5.- Vulnerability 1 week
6.- Risk and consequences 1 week
7.- Economics of Adaptation 2 weeks
8.- Risk Governance and communication 1 week

Metodologias de ensino (avaliação incluída)

For each week an introductory lesson will be presented and a working case for the students to work on it.

A Comprehensive case study will be required and the students should present a report (40%) and an oral presentation public 10% with debate on it. Weekly cases will represent 20% and a final test on concepts 30%

Bibliografia principal

Risk Analysis in Engineering and Economics, 2nd Edition, Bilal M. Ayyub CRC

Environmental Hazards and Disasters Contexts, Perspectives and Management Bimal Kanti Paul, Wiley 2011

Introduction to International Disaster Management Third Edition Damon P. Coppola. Elsevier 2015

Academic Year	2022-23
Course unit	
Courses	Coastal Hazards - Risks, Climate Change Impacts and Adaption (COASTHazar)
Faculty / School	FACULTY OF SCIENCES AND TECHNOLOGY
Main Scientific Area	
Acronym	
CNAEF code (3 digits)	443
Contribution to Sustainable Development Goals - SGD (Designate up to 3 objectives)	11 13
Language of instruction	English
Teaching/Learning modality	Face to face

Coordinating teacher Óscar Manuel Fernandes Cerveira Ferreira

Teaching staff	Type	Classes	Hours (*)

* For classes taught jointly, it is only accounted the workload of one.

Contact hours

T	TP	PL	TC	S	E	OT	O	Total
30	20	0	0	0	0	0	0	125

T - Theoretical; TP - Theoretical and practical ; PL - Practical and laboratorial; TC - Field Work; S - Seminar; E - Training; OT - Tutorial; O - Other

Pre-requisites

no pre-requisites

Prior knowledge and skills

Not applicable

The students intended learning outcomes (knowledge, skills and competences)

To understand and be able to make an appropriate use of the fundamental concepts to be applied in risk assessment
To identify the different approaches, methods and tools to be used in risk assessment studies
To be able to assess and quantify the different risk levels
To learn the problems in decision making in a risk framework.

Syllabus

Content Sessions
1.- Basic notions of risk 1 week
2.- Economics of risk 2 weeks
3.- Hazard and impacts 1 week
4.- Exposure 1 week
5.- Vulnerability 1 week
6.- Risk and consequences 1 week
7.- Economics of Adaptation 2 weeks
8.- Risk Governance and communication 1 week

Teaching methodologies (including evaluation)

For each week an introductory lesson will be presented and a working case for the students to work on it.

A Comprehensive case study will be required and the students should present a report (40%) and an oral presentation public 10% with debate on it. Weekly cases will represent 20% and a final test on concepts 30%.

Main Bibliography

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