

	English version at the end of this document						
Ano Letivo	2022-23						
Unidade Curricular	GLOBAL WATER PROBLEMS AND INTEGRATED WATER MANAGEMENT						
Cursos	ECOHIDROLOGIA APLICADA - Erasmus Mundus (2.º Ciclo)						
Unidade Orgânica	Faculdade de Ciências e Tecnologia						
Código da Unidade Curricular	19311009						
Área Científica	CIÊNCIAS DO AMBIENTE						
Sigla							
Código CNAEF (3 dígitos)	420						
Contributo para os Objetivos de Desenvolvimento Sustentável - ODS (Indicar até 3 objetivos)	e 6 13 14						
Línguas de Aprendizagem	English						



Modalidade de ensino

presencial amd remote

**Docente Responsável** 

Luís Manuel Zambujal Chícharo

DOCENTE TIPO DE AULA TURMAS TOTAL HORAS DE CONTACTO (*)
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\* 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
2º	S1	16T; 6TP; 10S	78	3

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

## Precedências

Sem precedências

#### **Conhecimentos Prévios recomendados**

Not required

#### Objetivos de aprendizagem (conhecimentos, aptidões e competências)

At the end of the course the student must have an insight in the complexity of the water system and understand the need for a holistic approach. They must have an insight in the different demands for water and methods to reconcile all the demands in a sustainable way

#### Conteúdos programáticos

Integrated water resources management is the concept that tries to integrate all different functions of water systems taking into account supply and demand and this within the context of the physical, chemical and ecological characteristics of the system. The main aim is to provide enough and high quality water for all life.

Within this module the different aspects of integrated water resources management are discussed.



## Metodologias de ensino (avaliação incluída)

Teaching methods:

- Class contact teaching
- Lectures
- Guest lectures
- Assignments In group
- Directed self-study

## **Evaluation Methods:**

Examination

• Written with oral presentation

Continuous assessment

Case studies

### **Bibliografia principal**

Lenton R & M. Muller (Eds), 2009. Integrated Water Resources Management in Practice: Better Water Management for Development. Earthscan



Academic Year	2022-23
Course unit	
Courses	Applied Ecohydrology - Erasmus Mundus (2.º Cycle)
Faculty / School	FACULTY OF SCIENCES AND TECHNOLOGY
Main Scientific Area	
Acronym	
CNAEF code (3 digits)	420
Contribution to Sustainable Development Goals - SGD (Designate up to 3 objectives)	6 13 14
Language of instruction	English
Teaching/Learning modality	presencial and remote



**Coordinating teacher** 

Luís Manuel Zambujal Chícharo

Teaching staff	Туре	Classes	Hours (*)
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\* For classes taught jointly, it is only accounted the workload of one.

Contact hours	т	ТР	PL	тс	S	E	от	0	Total
	16	6	0	0	10	0	0	0	78

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 required

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

At the end of the course the student must have an insight in the complexity of the water system and understand the need for a holistic approach. They must have an insight in the different demands for water and methods to reconcile all the demands in a sustainable way

#### **Syllabus**

Integrated water resources management is the concept that tries to integrate all different functions of water systems taking into account supply and demand and this within the context of the physical, chemical and ecological characteristics of the system. The main aim is to provide enough and high quality water for all life.



## Teaching methodologies (including evaluation)

Teaching methods:

- Class contact teaching
- Lectures
- Guest lectures
- Assignments In group
- Directed self-study

# Evaluation Methods:

Examination

• Written with oral presentation

Continuous assessment

Case studies

### Main Bibliography

Lenton R & M. Muller (Eds), 2009. Integrated Water Resources Management in Practice: Better Water Management for Development. Earthscan