
Ano Letivo 2021-22

Unidade Curricular INTEGRATED PROJECT IN PORTUGAL-WORLD OR WORK 1

Cursos ECOHIDROLOGIA APLICADA (2.º Ciclo)

Unidade Orgânica Faculdade de Ciências e Tecnologia

Código da Unidade Curricular 19311003

Área Científica TECNOLOGIAS DE PROTEÇÃO AMBIENTAL

Sigla

Código CNAEF (3 dígitos) 420

Contributo para os Objetivos de Desenvolvimento Sustentável - ODS (Indicar até 3 objetivos) 6,13,14

Línguas de Aprendizagem ingles

Modalidade de ensino

presencial /remoto

Docente Responsável

Luís Manuel Zambujal Chícharo

DOCENTE	TIPO DE AULA	TURMAS	TOTAL HORAS DE CONTACTO (*)
Luís Manuel Zambujal Chícharo	TC; S	C1; S1	4TC; 4S
Dina Cristina Fernandes Rodrigues da Costa Simes	TC; OT; S	C1; ;S1; OT1	3TC; 3S; 2OT
Maria Margarida da Cruz Godinho Ribau Teixeira	OT; S; T	T1; ;S1; OT1	2T; 4S; 4OT

* 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	2T; 10TC; 4S; 16OT	104	4

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

Precedências

Sem precedências

Conhecimentos Prévios recomendados

biology, ecology

Objetivos de aprendizagem (conhecimentos, aptidões e competências)

The objective of the course is to provide progressive learning and training regarding the reality of the world of work in the thematic area of ecohydrology, water engineering and water management. The module will consider internships at stakeholders companies and institutions, research internships at University or associated research centers, or development of projects with the participation of stakeholders, at the University.

Conteúdos programáticos

- 1 √ identification of practical solutions by stakeholders from real water ecosystem situations
 - 2 √ develop, conceptually, the solutions
 - 3 √ Present and discuss the proposals with the stakeholders
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Metodologias de ensino (avaliação incluída)

The course will be based on field visits and meetings with stakeholders to select the topics to be developed and on tutorial classes to support the development of the students projects

There is an articulation of matters and classes to ensure the appropriate sequence of the project development, between theoretical, practical and theoretical-practical classes. Course assessment comprises a report on the case that will be studied. The course assessment will consider the valuation from the stakeholders (50%)

Evaluation:

1. A group work written with individual presentation on practical project
 2. A final written exam if group work evaluation is below 10/20 points
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Bibliografia principal

Chicharo, L. Wagner, I., Chicharo, M. A Lapsinka, M. Zalewski, M. (2009) Practical experiments guide for Ecohydrology (Eds.Chicharo et al.). UNESCO Manual ISBN: 978-989-20-1702-0. Faro, 121 pp

Zalewski M, Wagner-Lotkowska I. & Robarts D. R. (eds). 2004. Integrated Watershed Management √ Ecohydrology and Phytotechnology-Manual. UNESCO IHP, UNEP IETC.246pp.;http://www.unep.or.jp/ietc/Publications/Water_Sanitation/integrated_watershed_mgmt_manual

Wolanski, E., L. Chicharo, M.A. Chicharo (2008) Estuarine Ecohydrology. In Sven Erik Jørgensen and Brian D. Fath (Editor-in-Chief), Ecological Engineering. Vol. [2] of Encyclopedia of Ecology, 5 vols. pp. [1413-1422] Oxford: Elseier.

Academic Year 2021-22

Course unit

Courses

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 presential/ remote

Coordinating teacher Luís Manuel Zambujal Chícharo

Teaching staff	Type	Classes	Hours (*)
Luís Manuel Zambujal Chícharo	TC; S	C1; S1	4TC; 4S
Dina Cristina Fernandes Rodrigues da Costa Simes	TC; OT; S	C1; ;S1; OT1	3TC; 3S; 2OT
Maria Margarida da Cruz Godinho Ribau Teixeira	OT; S; T	T1; ;S1; OT1	2T; 4S; 4OT

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

Contact hours

T	TP	PL	TC	S	E	OT	O	Total
2	0	0	10	4	0	16	0	104

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

biology, ecology

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

The objective of the course is to provide progressive learning and training regarding the reality of the world of work in the thematic area of ecohydrology, water engineering and water management. The module will consider internships at stakeholders companies and institutions, research internships at University or associated research centers, or development of projects with the participation of stakeholders, at the University

Syllabus

- 1 ¿ identification of practical solutions by stakeholders from real water ecosystem situations
- 2 ¿ develop, conceptually, the solutions
- 3 ¿ Present and discuss the proposals with the stakeholders

Teaching methodologies (including evaluation)

The course will be based on field visits and meetings with stakeholders to select the topics to be developed and on tutorial classes to support the development of the students projects

There is an articulation of matters and classes to ensure the appropriate sequence of the project development,, between theoretical, practical and theoretical-practical classes. Course assessment comprises a report on the case that will be studied. The course assessment will consider the valuation from the stakeholders (50%)

Evaluation:

1. A group work written with individual presentation on practical project
 2. A final written exam if group work evaluation is below 10/20 points
-

Main Bibliography

Chicharo, L. Wagner, I., Chicharo, M. A Lapsinka, M. Zalewski, M. (2009) Practical experiments guide for Ecohydrology (Eds.Chicharo et al.). UNESCO Manual ISBN: 978-989-20-1702-0. Faro, 121 pp

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