School of Agriculture
Course Unit Syllabus

Level of qualification:
Short cycle (TESP)
Study cycle:
Environmental Protection Systems

Course Unit: **223506 – Drinking Water-Characteristics and Quality Parameters**

Year 1 **Semester 1** **ISCED Code: 712** **ECTS: 3,5**

Tipe of Course Unit: Compulsory **Delivery Mode:** Face-to-face **Language of Instruction:** Portuguese

COURSE COORDINATOR: Maria de Fátima Nunes de Carvalho

HOURS OF WORK

TOTAL HOURS	Contact Hours								Hours in autonomous work
	Theory	Theory and practice	Practical and laboratory work	Field work	Seminar	Internship	Tutorial guidance	Other	
87,5		**5**	**35**						**47,5**

Prerequisites (if applicable):

LEARNING OUTCOMES (knowledge, skills and competence)

- know the notions about water quality
- Define the concept of water for consumption
- Recognize the importance of drinking water quality
- Classify water for consumption
- Characterize the water for consumption according to technical parameters
- Identify water quality standards for consumption
- Identify the legal framework of the different categories of water.

CONTENTS

Sources of water polution and human Health

Water management

Water Quality concepts

Water Quality rules

Drinking water quality

DEMONSTRATION OF THE CONTENTS COHERENCE WITH THE COURSE UNIT'S LEARNING OUTCOMES

The student knowand identify different categories of water and is able to relate these categories to the existing legal standards. In addition, he knows the sources of water pollution and the need to preserve the water resources through the correct management.

TEACHING METHODOLOGIES

.Lectures, theoretical-practical exercises and online research classes

DEMONSTRATION OF THE COHERENCE BETWEEN THE TEACHING METHODOLOGIES AND THE LEARNING OUTCOMES

The use of online research after each presentation of content allows the student to participate actively in the acquisition of knowledge and to become autonomously involved in the teaching / learning process. On the other hand, the autonomous work accomplishes in the student the taste for the research. The presentation and defense of the work allows the student to develop

their communication skills and leadership, as well as argumentation.

EVALUATION METHODS

.Research / Exam

MAIN BIBLIOGRAPHY

ortez, A. (2012). Águas Minerais Naturais e de Nascente da Região Centro, Mare LIBERUM.

• Mascha, M. (2006). Fine Waters.Quirk Boocks. Philadelphia

• McGhee, T. Abastecimiento de Agua Y Alacantarillado.1999. 6ª Edição. Mc Graw Hill.

• Rocha, I; Vieira, D., A água: legislação, contenciodo contra-ordenacional, Jurisprudência. 2000. Coleção Ambiente. Porto Editora, LDA.

• ÁGUA Minerais e de nascente da Região Ce

• Decreto-Lei n.º306/2007 de 27 de Agosto. Diário da República n.º164 – I Série. Ministério do Ambiente, do Ordenamento do Território e do Desenvolvimento Regional. Portugal.

• Decreto-Lei nº 156/98 de 6 de Junho. Diário da República n.º 131/98 – I Série - A. Ministério da Agricultura, Desenvolvimento Rural e das Pescas. Portugal.

• Decreto-Lei nº 72/2004 de 25 de Março. Diário da República n.º 72/04 – I Série Ministério da Agricultura, Desenvolvimento Rural e Pescas. Portugal.

Year of implementation: 2016/2017 | Date of approval by the Technical-Scientific Board: