



Teaching Guide

| Identifying Data | | | | | 2023/24 |
|--------------------------|--|--------|--|-----------|---------|
| Subject (*) | Surface Water Assessment | | Code | 632549015 | |
| Study programme | Máster Universitario en Xestión Sostible da Auga | | | | |
| Descriptors | | | | | |
| Cycle | Period | Year | Type | Credits | |
| Official Master's Degree | 2nd four-month period | First | Obligatory | 3 | |
| Language | Spanish | | | | |
| Teaching method | Face-to-face | | | | |
| Prerequisites | | | | | |
| Department | Enxeñaría Civil | | | | |
| Coordinador | Barrientos Rodríguez, Victor | E-mail | victor.barrientos@udc.es | | |
| Lecturers | Barrientos Rodríguez, Victor Soriano Hoyuelos, Gemma | E-mail | victor.barrientos@udc.es gemma.soriano@udc.es | | |
| Web | | | | | |
| General description | Materia destinada a conocer y entender las Directivas nacionales y europeas relacionadas con estas masas de agua, así como conocer su origen, evaluación y parámetros ecológicos que determinan su estado. | | | | |

Study programme competences

| Code | Study programme competences |
|------|---|
| A1 | CON1 Describe the principles, concepts, and dimensions that encompass integrated water resources management and its role as a key tool for achieving water security and advancing the associated Sustainable Development Goals (SDGs). Identify problems related to water development, use, and access. Identify and compare water legislation at the European, national, regional, and local levels, as well as interpret conceptual frameworks on sustainable development and their application to the water sector, with a specific focus on the SDGs. Provide tools to explain the economics of water. Enumerate aspects of public taxation that may be relevant in water management. |
| A5 | CON5 Describe the fundamentals of water resources assessment and the main tools for hydrological planning, based on the Water Framework Directive, legislation, and global frameworks for water resource allocation, including the environmental component. Demonstrate that ecosystem services linked to water have high added value and that nature-based solutions enable a sustainable approach to water resource management. |
| B1 | HAB1 Use and compare water legislation and conceptual frameworks related to sustainable development. Operate with tools that allow estimating economic variables (macro and micro) related to water, and employ the tools to apply appropriate taxation and cost policies to water |
| B4 | HAB4 Analyze the European Union's Water Framework Directive and Floods Directive, their technical implications, and their implementation through hydrological planning. Utilize computer tools for problem-solving related to water management within the framework of both directives. Develop measurements and analysis of hydrologically relevant data and data related to the state of water bodies. Evaluate the effect of urban use on the watershed and analyze the consequences of discharging water (treated or untreated) into receiving water bodies. Additionally, develop strategies to protect areas of surface water and groundwater generation within watersheds, based on the principle of recognizing and enhancing ecosystem services. |
| C4 | COM4 Integrate the various sources that generate the water supply and the uses that create the demand into systems or balances that allow for proper management. Plan the water resource at both macro and micro scales, allocating water to different uses while integrating environmental and social demands |

Learning outcomes

| Learning outcomes | Study programme competences | | |
|---|-----------------------------|-----|--|
| Descreeber os principios, conceptos e dimensións que comprende a xestión integrada dos recursos hídricos e o seu papel como ferramenta clave para acadar a seguridade hídrica e avanzar na consecución dos ODS asociados. | AJ1 | | |
| | AJ5 | | |
| | | BJ1 | |



| | | | |
|--|--|-----|-----|
| | | BJ4 | |
| | | | CJ4 |

| Contents | |
|----------|-----------|
| Topic | Sub-topic |
| | |
| | |
| | |
| | |

| Planning | | | | |
|---------------------------------|----------------|----------------------|-------------------------------|-------------|
| Methodologies / tests | Competencies | Ordinary class hours | Student?s personal work hours | Total hours |
| Supervised projects | A1 A5 B1 B4 C4 | 2 | 9 | 11 |
| Mixed objective/subjective test | A1 A5 B1 B4 C4 | 2 | 9 | 11 |
| Directed discussion | A1 A5 B1 B4 C4 | 1 | 4 | 5 |
| Guest lecture / keynote speech | A1 A5 B4 C4 | 16 | 32 | 48 |
| Personalized attention | | 0 | 0 | 0 |

(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

| Methodologies | |
|---------------------------------|-------------|
| Methodologies | Description |
| Supervised projects | |
| Mixed objective/subjective test | |
| Directed discussion | |
| Guest lecture / keynote speech | |

| Personalized attention | |
|------------------------|-------------|
| Methodologies | Description |
| Supervised projects | |

| Assessment | | | |
|---------------------------------|----------------|-------------|---------------|
| Methodologies | Competencies | Description | Qualification |
| Supervised projects | A1 A5 B1 B4 C4 | | 15 |
| Mixed objective/subjective test | A1 A5 B1 B4 C4 | | 85 |

| Assessment comments |
|---------------------|
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| Sources of information |
|------------------------|
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| | |
|----------------------|---|
| Basic | <ul style="list-style-type: none"> - ().. - ().. - ().. <p>Real Decreto 817/2015, de 11 de septiembre 2015Real Decreto 817/2015, de 11 de septiembre 2011Directive 2008/105/EC setting environmental quality standards in the field of water policyReal Decreto 817/2015, de 11 de septiembre 2015Real Decreto 817/2015, de 11 de septiembre 2011Directive 2008/105/EC setting environmental quality standards in the field of water policy</p> |
| Complementary | <p>https://www.miteco.gob.es/es/agua/legislacion/Marco_normativo_planificacion.aspxhttps://www.miteco.gob.es/es/agua/temas/estado-y-calidad-de-las-aguas/aguas-superficiales/categorias-y-tipos-de-masas-de-agua/GUÍA PARA LA EVALUACIÓN DEL ESTADO DE LAS AGUAS SUPERFICIALES Y SUBTERRÁNEAS MINECO 2021</p> |

Recommendations

Subjects that it is recommended to have taken before

Subjects that are recommended to be taken simultaneously

Biological Assessment of Water Quality/632549024
Water, Sustainability and Common Good/632549001

Subjects that continue the syllabus

Hydrological Basins Monitoring for the Tracking of Water Mases/632549023
Limnology/632549021

Other comments

"-Segundo se recolle nas distintas normativas de aplicación para a docencia universitaria deberase incorporar a perspectiva de xénero nesta materia (usarase linguaxe non sexista, utilizarase bibliografía de autores/as de ambos sexos, propiciarse a intervención en clase de alumnos e alumnas...)-Traballarse para identificar e modificar prexuízos e actitudes sexistas e influirse na contorna para modificalos e fomentar valores de respecto e igualdade.-Deberanse detectar situacións de discriminación por razón de xénero e proporanse accións e medidas para corrixilas."

(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.