

Syllabus Information

Academic year: 2023/24

Subject: 25262 -

Faculty / School: 201 - Escuela Politécnica Superior

Degree: 571 - Degree in Environmental Sciences

ECTS: 6.0

Year:

Semester: Second Four-month period

Subject type: Optional

Module:

1. General information

The subject and its expected results respond to the following approaches and objectives:

- Acquire an integrated knowledge of hydrological processes relating them to partial concepts addressed in other subjects.
- Learn to handle the terminology and methodology for data acquisition and tools for interpretation and quantification of hydrological cycle components, as well as the management of hydrological information sources.
- Know and learn to develop the basic tools for water resources management: demand assessment, conservation and increase of resources.
- Be familiar with and effective within the regulatory framework of hydrology.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), contributing to some extent to their achievement: Goal 6: Clean water and sanitation; Goal 9: Industry, innovation and infrastructure; Goal 11: Sustainable Cities and Communities; Goal 12: Responsible Production and Consumption; Goal 13: Climate action; Goal 14: Life underwater; Goal 15: Life of terrestrial ecosystems.

2. Learning results

- To analyse critically and objectively the environmental problems related to water resources at different spatial and temporal scales
- To quantitative and qualitatively assess water resources at the basin scale.
- To use the administrative decision-making mechanisms for water management in Spain and in the European Union.
- To identify the role of the environmental professional in water resources management.

3. Syllabus

BLOCK I. THE HYDROLOGICAL CYCLE

BLOCK II. SURFACE HYDROLOGY

BLOCK III. GROUNDWATER HYDROLOGY

BLOCK IV. ENVIRONMENTAL PROBLEMS RELATED TO WATER MANAGEMENT

4. Academic activities

Master classes: 30h

Theoretical-practical sessions in which the contents of the subject will be explained.

Problems and cases: 20h

Resolution of cases and practical exercises for the handling and interpretation of data.

Field trips 10h

These activities are subject to the budget available for their implementation.

Personal study. 87h

Assessment tests. 3h

5. Assessment system

The student must demonstrate achievement of the intended learning results through the following assessment activities:

In case of attendance to 70% of the classes, the student will have the right to continuous evaluation by doing an individual written work , on a topic related to the subject previously agreed with the teacher. This work will represent 100% of the grade for the subject.

In case of non-attendance to 70% of the classes, or in those cases in which the student wishes to improve their grade in the work, has failed it or chooses not to do so, the subject will be evaluated by means of a global written test (100% of the grade). The test will consist of a written exam with short theoretical questions (50%) and problems (50%). It will be held on the date of the official call. The overall written test will be considered passed if the final grade is higher than 5 and the partial grade of theory and problems is equal to or higher than 4.0.

These conditions will be applied in the same way in the two official calls.

Success rates in previous years (biennial subject):

2019/2020	2021/2022
100%	100%