Universidad Zaragoza

Academic Year/course: 2024/25

28435 - Ecology and the Environment

Syllabus Information

Academic year: 2024/25
Subject: 28435 - Ecology and the Environment
Faculty / School: 105 - Facultad de Veterinaria
Degree: 451 - Degree in Veterinary Science
ECTS: 3.0
Year:
Semester: First semester
Subject type: Optional
Module:

1. General information

The subject provides the basic contents of Ecology and the Environment and the necessary vision for its use in the

different facets of the veterinarian's professional development.

In the field of Ecology, this subject aims to provide students with knowledge of the interactions that explain the abundance and distribution of organisms and the functioning of populations, communities and ecosystems.

With regard to the environment, some environmental impacts will be addressed.

These approaches and objectives are aligned with Sustainable Development Goal 15 (SDG) of the 2030 Agenda (https://www.un.org/sustainabledevelopment/es/): Life of terrestrial ecosystems.

2. Learning results

Upon completion of this subject, the student will be able to:

Evaluate and interpret the role of abiotic factors in the structure and functioning of ecological systems at different levels of organization.

Know and apply biological population growth models Recognize in the field the cycle of organic matter in terrestrial ecosystems. Identify the main environmental services of ecosystems.

Critically know the main syndromes of Global Change Critically analyse ecological information.

Know the meaning and apply the methods to estimate biological diversity.

Interpret communities and ecosystems over time, incorporating the concept of disturbances.

3. Syllabus

Topic 1. Introduction and basic concepts

Topic 2. Populations

Topic 3. Communities

Topic 4. Ecosystems

Topic 5. Conservation Biology

Topic 6. Environmental Education

Topic 7. Environmental problems in the abiotic environment

Topic 8. Environmental problems in the biotic environment

Topic 9. Zoos and aquariums

Topic 10. Environmental microbiology

4. Academic activities

Master classes: 20 h

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

Special practices: 10 h

Field trip to use what was learned in the theory class

Personal study: 43 h

Assessment tests. 2 h

Total: 75 h

5. Assessment system

Written knowledge evaluation test: knowledge will be evaluated by means of a written test with multiple-choice questions that will not be graded negatively. Only one of the answers is correct.

The grade for this test will account for 100% of the final grade. The test must be passed with a grade higher than 5.

6. Sustainable Development Goals

15 - Life on Land