



COURSE DATA

DATA SUBJECT

Code: 33788

Name: Biogeography

Cycle: Undergraduate Studies

ECTS Credits: 6

Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1318 - Degree in Geography and the Environment	Facultat de Geografia i Història	3	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1318 - Degree in Geography and the Environment	Biogeography	COMPULSORY

COORDINATION

RUESCAS ORIENT ANA BELEN

SUMMARY

Biogeography is concerned with the spatial and temporal distribution of living beings on the Earth's surface. As a part of Geography its object is the study of the territory as a system. One of the elements constituting this system is the vegetation (and wildlife). Biogeography doesn't study vegetation (and wild) in itself, but in relation to the other - natural and cultural - ingredients of the territory and of the landscape.

Based on knowledge acquired in previous subjects like *Introduction to Physical Geography* of the first year, Biogeography deepens in issues that concern the Biosphere by applying some of the teachings received in *Climatology*, *Geomorphology I* and *II* - for the special relevance of climate and topography as a distribution factor of life and their importance in explaining the vegetation landscape. Biogeography also returns on some of the techniques of interpretation and mapping, for interpretive reading of vegetation maps and aerial photos and to design simple vegetable distribution graphs.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.



OTHER REQUIREMENTS

It is recommended that students entering the course of Biogeography have previously studied and passed the following courses: Introduction to Geography and Environment, Introduction to Physical Geography, Cartography I, Climatology, Geomorphology I, Geomorphology II, Geography of Spain and Geography of the Land of Valencia.

COMPETENCES / LEARNING OUTCOMES

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Analyse and value landscapes from a spatial-temporal perspective.

Be able to relate the natural environment and the social and human spheres.

Be able to work independently.

Be able to work in interdisciplinary teams.

Have capacity for analysis and synthesis.

Have oral and written communication skills in one's own language and in a foreign language.

Learn about methodology and fieldwork.

Learn about physical geography.

Learn basic techniques for fieldwork in geography and particularly for reading and interpreting the landscape in geographic terms.

Show motivation for quality, responsibility and intellectual honesty.

DESCRIPTION OF CONTENTS

1. Biogeographical concepts and major scientific approaches.

- a) Courses presentation. What is Biogeography?
- b) Key figures and milestones in the progress of Biogeography.



2. Fundamentals of Soil Phogeography.

- a) The changing Earth: the tectonic history of the continents
- b) Concepts of Soil Science. Soil formation. Soil components and properties.

3. Biogeographic patterns

- a) Review of the current configuration of geographical patterns (topography, climatology, soils).
- b) Distribution factors of living beings: internal and external factors (biotic and abiotic)
- c) Large biomes
- d) Introduction to Chorology: the concept of biogeographic realm.

4. Distribution of species

- a) Dispersion and immigration
- b) Speciation and extinction
- c) Biogeography of islands.

5. The Phytogeography

- a) The physiognomic-ecological method. Types of formations. Classification. The vegetation map of Europe.
- b) The phytosociological method. Characteristic, differential and accompanying species. Inventories.
- c) The map of vegetation series of Spain.
- d) Vegetation dynamics. Plant succession and study methods. Current and potential vegetation.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Other activities	15,00
Classroom practices	15,00



Total hours	60,00
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NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	14,00
Individual or group project	20,00
Independent study and work	20,00
Preparation of lessons	15,00
Preparation for assessment activities	15,00
Resolution of case studies	6,00
Total hours	90,00

TEACHING METHODOLOGY

Teaching methodology combines theory, practice and fieldwork. Theoretic subjects are to be prepared by students, following professor's guidelines and literature. Practical work consists in short extension exercises, and two more extensive works, about the characterization of a forest structure and about the ecological factors affecting altitudinal distribution of vegetation. This more important works are to be performed in teams during practical classes, fieldwork and homework. Furthermore, students will be guided in plant classification and in the drawing up of a virtual herbarium.

CLASSES: The thread of the biogeographical subjects and the most complex biogeographical issues will be explained in lectures. Study material, literature and sources will be also indicated. The student will be provided with a dossier for drills and exercises. Practical work will be explained in practical classes, where also teamwork will be supervise and results will be discussed.

ACTIVITIES OUT OF CLASSROOM: Fieldwork. See Annex to the Guide.

TEAMWORK Mandatory. See Annex to the Guide.

TUTORIALS: Students will have at their disposal weekly mandatory hours of tutorials and also virtual access to the professor.

EVALUATION

The continuous assessment (class interventions, exercises) will be combined with the assessment of the reports and practices and that of the final exam.

1. Continuous assessment: exercises and interventions 10% of the mark.
2. Internships: 30% of the grade.
3. Final exam: 60% of the grade.



The delivery of the exercises and works correctly elaborated is condition sine qua non to pass the asignatura.

If the final exam is not passed, the other marks will not be added to the final mark.

The second call will evaluate the theoretical and practical criteria of the subject in the same way as in the first call.

REFERENCES

Basic

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- Otero González. J.C. (2020) La Geografía de la Vida: la Biogeografía. Ed. Aula Magna, España, pp.510
- Porta Casanellas, J., López-Acevedo, M. y Roquero, C. (2011) (3ª ed.) Edafología. para la agricultura y el medio ambiente. Mundi Prensa, 929 pp.
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- Strahler, A. & Strahler, A. (1996) Geografía Física, Barcelona, Omega, 550 pp.

Additional

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- Bryson, B. (2003) Una breve historia de casi todo. Ed, RBA, Barcelona, pp.452
- Cámara R., Díaz del Olmo F. y Borja, C. (2013), Muestreo en transecto de formaciones vegetales de fenorófitos y caméfitos (MIFC) (II): estudio de los sabinars de la Reserva Biológica de Doñana (RDB) (España), Estudios Geográficos, Vol. LXXIV, 274, pp.89-114. Doi 10.3989/estgeogr.201304
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- Rivas-Martínez, S. (1987) Mapa y Memoria de series de vegetación de España 1:400.000. Madrid: Ministerio, Madrid, ICONA, 268 pp.
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