

COURSE INFORMATION

NAME OF THE SUBJECT: IBERIAN FORESTS

Code number: 757709301
Degree in Environmental Sciences
Academic Year: 2015-2016
Elective course. 4th year
First semester: 1 hour a week
3 credits
Web site: <http://www.uhu.es/pablo.hidalgo/docencia/iberianforests.html>
Additional information available in Moodle.

TEACHING STAFF

Prof.: Pablo J. Hidalgo
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Office hours:
First Semester: Monday 10:00 to 13 :00. Tuesday from 10:00 to 13 :00
Second Semester: Monday 10:00 to 13:00. Tuesday from 10:00 to 13:00

PROGRAMME

1. DESCRIPTION

The Iberian Peninsula has many different forests widely distributed on the territory. Many of them have a natural origin (native) but some others have a human-induced origin (reforested). Iberian Forests introduces concepts of biology, ecology, physiology of the main forest in the Iberian Peninsula for understanding how trees are influenced by environmental conditions. Special attention will be paid to human influence to the understanding and management of tree and forests.

2. PREREQUISITES

Previous notions of biology, ecology and botany are required. This course is recommended for students of Biology, Environmental Sciences, Geography, Forestry, etc. For other students please contact to professor.

3. OBJECTIVES/LEARNING OUTCOMES

The main goal is to analyze the structure and dynamics of the main natural forests in the Iberian Peninsula. The final aim is to provide to the students the knowledge to face up any management program on these forests.

By the end of the module students should be able to:

- To know the main forests in the Iberian Peninsula and other areas in Europe.
- To study the distribution of these forests in the Iberian Peninsula and in the world.
- To understand the structure and dynamic of the different forests.
- To appreciate the value of the forest ecosystem.
- To assess the main threats of the natural forests.

4. TEACHING METHODOLOGY

Theory: master class in the classroom using presentations and blackboard.

Excursion: Field trip to visit natural protected areas. In this excursion we will understand and discuss the structure and dynamics of Mediterranean and riparian Iberian forests.

5. CONTENTS

THEORY:

1. PHYSICAL GEOGRAPHY OF THE IBERIAN PENINSULA.
2. TEMPERATE FOREST (ATLANTIC FOREST).
3. RIPARIAN FOREST.
4. MEDITERRANEAN FOREST.
5. HIGH MOUNTAIN FOREST.

PRACTICE:

Excursion to Natural Park of Sierras Subbéticas (Córdoba). Expected Date: January 2016.

6. BIBLIOGRAPHY

Basic:

- CARDELÚS, B. (1990). Enciclopedia de la naturaleza de España. Debate. Madrid.
- COSTA TENORIO, M., C. MORLA y H. SAINZ (1997). Los bosques ibéricos. Una interpretación geobotánica. Planeta. Barcelona.
- LOPEZ-GONZÁLEZ, G. (2004). Guía de los árboles y arbustos de la Península Ibérica y Baleares. Mundi-Prensa. Madrid.

Specific:

- ABER, J. D. & MELILLO, J.M. (2001). Terrestrial Ecosystems. Saunders College Publishing. Philadelphia.
- ARCHIBOLD, O.W. (1995). Ecology of the World Vegetation. Chapman & Hall. London.
- BAILEY, R. G. (1998). Ecoregions. The Ecosystem Geography of the Oceans and Continents. Springer-Verlag. New York.
- BRECKLE, S.W. (2002). Walter's Vegetation of the Earth. The Ecological Systems of the Geo-Biosphere. Springer-Verlag. New York.
- CANO GARCÍA, G. (Coord.) (1998). Naturaleza de Andalucía. Tomo 1. Naturaleza y Espacios Andaluces. Ediciones Giralda, S.L. Sevilla.
- FERRERAS, C. y AROZENA, M.E. (1987). Guía Física de España 2. Los Bosques. Alianza Editorial. Madrid.
- JURADO DOÑA, V. (Coord.) (1998). Naturaleza de Andalucía. Tomo 7. El Medio Forestal. Ediciones Giralda, S.L. Sevilla.
- KIMMINS, J. P. (1996). Forest Ecology. Prentice Hall. New Jersey.
- LABRADOR, J. y ALTIERI, M.A. (Coords.) (2001). Agroecología y desarrollo. Aproximación a los fundamentos agroecológicos para la gestión sustentable de agrosistemas mediterráneos. Mundi-Prensa. Universidad de Extremadura. Madrid.

- PINEDA, F.D.; DE MIGUEL, J.M.; CASADO, M.A. y MONTALVO, J. (Eds.). (2002). La Diversidad Biológica de España. Pearson Educación. Madrid.
- RUBIO RECIO J.M. (1989). Biogeografía. Paisajes Vegetales y Vida Animal. Síntesis. Madrid.
- SANCHIS, E.; FOS, M. y BORDÓN, Y. (2003). Ecosistemas Mediterráneos. Editorial de la UPV. Valencia.
- SHUGART, H. H. (1998). Terrestrial ecosystems in changing environments. Cambridge University Press. Cambridge.
- TERRADAS, J. (2001). Ecología de la vegetación. Omega. Barcelona.
- VALLADARES, F. (Ed.) (2004). Ecología del bosque mediterráneo en un mundo cambiante. Ministerio de Medio Ambiente. Madrid.
- YOUNG, R.A. & GIESE, R.L. (Eds.) (2003). Introduction to Forest Ecosystem Science and Management. John Wiley & Sons. New York.
- ZAMORA, R. y PUGNAIRE, F.I. (Eds.) (2001). Ecosistemas Mediterráneos. Análisis Funcional. CSIC y AEET. Madrid.

7. ASSESSMENT

Course assessment is worth 30% of the final course grade. It will consider the attendance, essays, activities, excursions, etc.

The final exam is worth 70% of the final course grade. The exam will be multiple choice and short answer.