

**Proyecto docente de la asignatura**

<b>Subject name</b>	<b>Geobotany</b>		
<b>Subject area</b>	Natural Sciences		
<b>Module</b>	Optional Module		
<b>Qualification</b>	Degree in Forest Engineering and Natural Environmet		
<b>Plan</b>	449	<b>Code</b>	42163
<b>Teaching period</b>	Second Semester	<b>Type/Nature</b>	Optional
<b>Level/Stage</b>	Degree	<b>Curso</b>	2º
<b>ECTS Credits</b>	3		
<b>Language of Instruction</b>	English		
<b>Lecture in charge</b>	Pilar Zaldívar García, PTU MSc, PhD Research interest: open-cast coal mines ecological restoration.		
<b>Contact details</b>	<a href="mailto:zaldivar@agro.uva.es">zaldivar@agro.uva.es</a> , 979 10 84 39		
<b>Tutorial timetable</b>	<a href="http://www.uva.es/export/sites/uva/2.docencia/2.01.grados/2.01.02.01.fertaformativagrados/2.01.02.01.alfabetica/Grado-en-Ingenieria-Forestal-y-del-Medio-Natural/">http://www.uva.es/export/sites/uva/2.docencia/2.01.grados/2.01.02.01.fertaformativagrados/2.01.02.01.alfabetica/Grado-en-Ingenieria-Forestal-y-del-Medio-Natural/</a> and click on the tab "tutorías" also: <a href="http://www.uva.es">www.uva.es</a> >Grados o Masteres>Degree>"Tutorías"		
<b>Department</b>	Agroforestry Science		
<b>Knowledge area</b>	Botany		



## 1. Course justification

### 1.1 Context of the subject

This course explores the biogeography and ecology of the world's main biomes. It provides an introduction to the earth's biological history and development of regional floras. Topics covered in this course include the distribution patterns of biomes, from the poles to the tropics, their ecological adaptations to climate and soil, vegetation dynamics and response to disturbance. Land use and global environmental change will be also taken in account. The scope is global, with secondary emphasis on Mediterranean ecosystems.

### 1.2 Relationship with Academic Program

The course will develop a broad range of insights useful to forestry and natural resources students. It is an extraordinary introduction to the variety of trees and other plants of value to man, providing approaches to environmental and social problems.

### 1.3 Pre-requisites

There are not pre-requisites for Geobotany, although Biology, Dendrology, Botany, Ecology, Climatology and Soil Sciences may be useful.

English college reading and writing is assumed.

## 2. College Learning Outcomes

### 1.3 Generals

The General competences (G1 to G27) will be addressed on a global basis, and, particularly, efforts will be made to the compliance of:

G3 Be able to analyze and synthesize.

G4 To be capable of organizing and of planning.

G5 Be able to communicate effectively, orally and in writing, with both internal audiences.

G15 To show critical reasoning.

## 3. Course Outcomes and Objectives

- Demonstrate knowledge of the main historical processes of the life on earth.
- Demonstrate basic understanding of global climate.
- Be familiar with the major vegetation types of the World.
- Be familiar with important boreal, temperate and tropical trees.
- To understand the dynamics of natural ecosystems, where they occur and its adaptations to environmental conditions.
- To understand how major biomas have changed in the past and how they may change due to global environmental change.
- To do basic bibliographic research and present scientific information on a forest product of a representative country.
- Learnt to assess and analyze the work of a colleague student.



#### 4. General Outline of Topics Covered

##### Contents:

1. Introduction. Earth History and Biogeography.
2. Global climate and vegetation.
3. Tropical forests.
4. Tropical savannas.
5. Deserts and Semi-Deserts.
6. Mediterranean woodlands and shrublands.
7. Temperate forests: rain, evergreen and deciduous.
8. Temperate grasslands.
9. Boreal forests.
10. Tundra and alpine vegetation.

##### Written assignment:

Each student will complete an individual project. Instructions will be provided at the beginning of the course.

- A short written report about a representative tree specie of your choice is required. The paper must be handed in by mid course, and it will be proofread and corrected by your peers and the professor. The final edited version will be handed in by the end of the course.
- A short, 10 minutes, oral presentation of your report is also mandatory.

##### Recommended readings:

Lecture powerpoints will be posted on the course website (Moodle).

Archibold, O.W. (1995) Ecology of World Vegetation. Chapman & Hall. London.

Shultz, J. (1995) The Ecozones of the World. The Ecological Divisions of the Geosphere. Springer. Berlin.

Walter, H. 1985. Vegetation of the Earth and Ecological Systems of the Geo-biosphere. Springer. Berlin.

#### 5. Methods of Instruction

A combination of lecture and students active discussion are used in this course. Students will be encouraged to share thoughts and opinions. Participation and interaction with other will be required.

#### 6. Student dedication to the Course

In Class	Hours	Outside Class	Hours
Lectures	24	Preparation for assessment	30
Proofreading of writing assignment	2	Preparation of writing assignment.	11
Oral Presentations	4	Preparation of oral presentation	4
<b>Total in class</b>	<b>30</b>	<b>Total outside class</b>	<b>45</b>



## 7. Grading Criteria

Student Evaluation	Percentage on the final course grade	Comments
Class Quizzes	20	Multiple choice questions. Plickers or Kahoot! may be used.
Class Presentation (10 minutes)	10	A rubric with grading details will be provided. Emphasis will be on slides and speaking.
Writing assignment	20	Consist on a 6-8 page (double spaced, 12 pt fon, references and figures included). Specific guidance, an example and a rubric with grading details will be provided.
Final Exam	50	Short questions and blank maps to draw the area of a biome. Focus will be on understanding concepts.

### Grading Criteria

Written assignment and class presentation are mandatory. It is not possible to pass the course with final examination only.

### Course Policies

- Attendance:**  
 Lectures form a core component of this course. Students must ensure that they are available to attend lectures and arrive with punctuality. They should pay close attention to the class schedule and read the material prior to class. They are welcome to share new ideas during class and are encouraged to read related papers.
- Technology in the classroom:**  
 No cellphones are allowed. Please, turn-off your cell phone prior to the start of class. You will be asked to leave the course for the day if you are using your phone.
- Policy on Academic Ethics and Honesty:**  
 The University of Valladolid (UVa) regards cheating as a serious academic offence. Anyone caught cheating will automatically receive a 0/10 for the quiz/exam/assignment, and will be reported to the dean. Your responsibility, besides maintaining a high standard of personal honesty, includes taking precautions to prevent others from copying your work. A student's assessed work may be reviewed against electronic source material using computerised detection mechanisms.

## 8. Final considerations

- General competence *G3 Be able to analyze and synthesize* will be graded with tests, final exam and written assignment.
- General competence *G4 To be capable of organizing and of planning* will be graded with the written assignment and the oral presentation.
- General competence *G5 Be able to communicate effectively, orally and in writing, with both internal audiences* will be graded with the oral presentation.
- General competence *G15 To show critical reasoning* will be graded throughout the course.