

**Teaching guidelines – Course 2021/2022**

<b>Subject name</b>	Geobotany		
<b>Subject area</b>	Natural Sciences		
<b>Module</b>	Optional Module/ International Semester on Forestry		
<b>Qualification</b>	Bachelor degree in Forest and Natural Environment Engineering		
<b>Plan</b>	449	<b>Code</b>	47137
<b>Teaching period</b>	Spring Semester	<b>Type/Nature</b>	Optional
<b>Level/Stage</b>	Bachelor	<b>Curso</b>	2º
<b>ECTS Credits</b>	3		
<b>Language of Instruction</b>	English		
<b>Instructor</b>	Pilar Zaldívar García, MSc, PhD Juan García Duro, MSc, PhD		
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<b>Tutorial timetable</b>	<a href="http://www.uva.es/export/sites/uva/2_docencia/2.01_grados/2.01.02_o_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_o_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 Sciences		
<b>Knowledge area</b>	Botany		



## 1. General course description

### 1.1 Scope

This course explores the biogeography and ecology of the world's main biomes. It introduces 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 a background of Biology, Dendrology, Botany, Ecology, Climatology and Soil Sciences would be very useful.

English college reading and writing is assumed.

## 2. Student Learning Outcomes

### 2.1 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. 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 biomass 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

**Contents:** *the order and topic content may change if needed*

1. Introduction. Earth History and Biogeography.
2. Global climate and vegetation.
3. Tundra.
4. Alpine vegetation.
5. Boreal forests.
6. Temperate deciduous forest.
7. Temperate grasslands.
8. Mediterranean woodlands and shrublands.
9. Temperate rainforests.
10. Deserts: hot and cold deserts.
11. Tropical savannas.
12. Tropical forests.
13. Mangroves and other aquatic vegetation.
14. Urban ecosystems.

#### **Mandatory:**

Each student will present an oral presentation based on power point slides. The topic will be a species of one of the studied biomes.

A Rubrica will be provided.

The oral presentation will be peer reviewed. The grade will be a combination of teacher grade plus student grade.

#### **g.1 Basic references for the course**

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

Archibald, 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.

#### **g.2 Specific readings**

Specific related pdf- papers of each topic will be posted on Moodle.

## 5. Teaching methods

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

## 6. Student dedication to the Course

In Class	Hours	Outside Class	Hours
Lectures	24	Study and personal work	35
Oral presentation	6	Preparation of oral presentation	10
<b>Total in class</b>	<b>30</b>	<b>Total outside class</b>	<b>45</b>
<b>Total in class + outside class</b>			<b>75</b>

## 7. Grading

Activity	Percentage of final grade	Comments
Weekly quizzes (continuous evaluation)	50	Mandatory - individual Short questions about previous week topic
Oral presentations	20	Mandatory - individual A rubric with grading details will be provided. Emphasis will be on information on slides and speaking.
Final Exam	30	Mandatory - individual Short questions and blank maps to draw the area of a biome. Focus will be on understanding concepts.

### Grading Criteria

Weekly quizzes and class oral presentation are mandatory. It is not possible to pass the course with final examination only. The focus of the course is continuous evaluation.

Grade of final exam must be equal or greater than 5.0 to calculate the final grade.

- **Ordinary examination session:**
  - Final exam: questions covering all studied biomes, 20 % of final score.
- **Extra examination session:**
  - Only if students didn't pass ordinary examination session, same conditions as above.



## 8. General Course Policies

### Attendance:

- Lectures form a core component of this course. Students must ensure that they are available to attend lectures and to show up on time.
- Attendance at class is expected, and students should be prepared to justify absences.
- All classes will have duration of two hours with a 10 min break.
- They should pay close attention to the class schedule and read the material prior to class.

### Class Demeanor Expected by Instructor:

- Students should be considerate, polite, open-minded, objective and show interest in the work of others. They are welcome to share new ideas during class and are encouraged to read related papers.
- Food or drinks, except water, are prohibited in the classroom. Students may use the 10 min break to have coffee or food.
- Face masks would be required depending on health regulations.

### Technology in the classroom:

- No cellphones are allowed unless the instructor ask you to use them. 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.
- Laptops are permitted in class, however, if they become a distraction the instructor may ask you to put them away.
  - Students may use the 10 min break to attend social media: Facebook posts, WhatsApp, etc.

### 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 computerized detection mechanisms.