

**Teaching guidelines – Course 2023/2024**

Subject name	Geobotany		
Subject area	Natural Sciences		
Module	Optional Module/ International Semester on Forestry		
Qualification	Bachelor degree in Forest and Natural Environment Engineering		
Plan	449	Code	47137
Teaching period	Spring Semester	Type/Nature	Optional
Level/Stage	Bachelor	Curso	2º
ECTS Credits	3		
Language of Instruction	English		
Instructors	<p>Dra. María Isabel Pozo Romero, MsC, PhD. Assistant Professor (subject coordinator, professor)</p> <p>I have focused my research on the three-way interaction among plants, microbes and pollinators.</p> <p>My main research fields lay within chemical ecology, evolutionary ecology, ecology of microbial communities, pollen and nectar.</p> <p>https://www.researchgate.net/profile/Maria-Pozo-13 https://scholar.google.com/citations?user=xEu4k40AAAAJ&hl=es.</p>		
Contact details	<p>mariaisabel.pozo@uva.es 979108458 (office) Main building (Green building) Office HF233</p>		
Tutorial timetable	<p>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/ and click on the tab “tutorías” also: www.uva.es>Grados o Masteres>Degree>”Tutorías”</p> <p>It is strongly advised to contact the professor beforehand in order to organize the sessions.</p>		
Department	Agroforestry Sciences		
Knowledge area	Botany		
Date of review by the Degree Committee	July 20, 2023		



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.

As the subject is taught in English, it is assumed that the student has a basic to intermediate knowledge of the language in the 4 skills: listening, speaking, reading and writing.

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. Wetlands.

Mandatory:

Each student will prepare and present a poster. The topic will be a key element of the flora, news over conservation and legislation, main threats, etc. of one of the studied biomes.

The oral presentation of the poster (5 min plus questions) will be peer reviewed. The grade will be a combination of teacher grade plus student grade.

g.1 Basic references for the course

<https://buc->

uva.alma.exlibrisgroup.com/leganto/public/34BUC_UVA/lists/5132823200005774?auth=SAML§ion=5132824660005774

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	39
Oral presentation	2	Preparation of oral presentation	10
Total in class	26	Total outside class	49
Total in class + outside class			75

7. Grading

Activity	Percentage of final grade	Comments
Poster presentation	10	Mandatory - individual A rubric with grading details will be provided. Emphasis will be on information, layout and speaking.
Final Exam (Ordinary examination session)	90	Mandatory - individual Short questions and blank maps to draw the area of a biome. Focus will be on understanding concepts.

Grading Criteria

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, 90 % of final score.
- **Extra examination session (resit exam period):**
 - Final exam: questions covering all topics, 90% of final score.

Art 35.4 of the ROA 35.4. Participation in the extraordinary examination session (resit exam period) will not be subject to class attendance or to the presence in previous tests, except in the cases of external practices, laboratories or other activities whose evaluation would not be possible without the prior completion of the aforementioned tests.

<https://secretariageneral.uva.es/wp-content/uploads/VII.2.-Reglamento-de-Ordenacion-Academica.pdf>



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.

Technology in the classroom:

- Laptops are permitted in class, however, if they become a distraction the instructor may ask you to put them away.

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.