



FACULTAD DE CIENCIAS
GRADO DE CIENCIAS AMBIENTALES
2024/25 YEAR
**GESTIÓN Y CONSERVACIÓN DE LA
FLORA Y VEGETACIÓN**



Course details

Course name: GESTIÓN Y CONSERVACIÓN DE LA FLORA Y VEGETACIÓN

Code: 101564

Degree/Master: GRADO DE CIENCIAS AMBIENTALES

Year: 4

Field:

Character: OPTATIVA

Duration: SECOND TERM

ECTS Credits: 6.0

Classroom hours: 60

Face-to-face classroom percentage: 40.0%

Study hours: 90

Online platform: <https://moodle.uco.es/>

Coordinating teacher

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Brief description of the contents

Threatened flora: Legislation. Red Book of endangered species. Extinction risk factors. Criteria for assessment of the degree of threat. Conservation plans for threatened plant species. Ex situ and in situ

conservation techniques. Habitats of interest: Habitats of Community interest (Natura 2000 Network). Management and conservation of plant communities.

Prerequisites

Prerequisites established in the study plan

English certificate B1. This subject is a bilingual subject, the content are mainly in English and it can be taken into account to obtain the bilingual mention to the degree, so a minimum of English knowledge is required.

Recommendations

English certificate B2. It would be recommended a B2 English level due to the subject is mainly in English.

Study programme

1. Theory contents

TOPIC 1. INTRODUCTION TO CONSERVATION BIOLOGY

TOPIC 2. BIOGEOGRAPHY AND HABITATS

TOPIC 3. ENDEMISMS AND SPECIATION

TOPIC 4. GLOBAL CHANGE AND BIODIVERSITY LOSS

TOPIC 5. POPULATION SIZE AND CONSERVATION

TOPIC 6. RESPONSES TO THE LOSS OF DIVERSITY

TOPIC 7. INTRODUCTION TO PLANT CONSERVATION

TOPIC 8. THREATS TO PLANTS. ENDANGERED FLORA

TOPIC 9. REPRODUCTIVE BIOLOGY AND CONSERVATION GENETICS.

TOPIC 10. MANAGEMENT AND CONSERVATION STRATEGIES FOR SPECIES AND POPULATIONS

THEME 11.

TOPIC 11. PLANT CONSERVATION STRATEGIES; IN SITU CONSERVATION.

TOPIC 12. PLANT CONSERVATION STRATEGIES; EX SITU CONSERVATION.

TOPIC 13. PLANT RECOVERY PLANS.

2. Practical contents

Visit to the Andalusian Germplasm Bank

Visit to one of the centres of the Network of Centres for the Conservation and Recovery of Flora of the Regional Ministry of Sustainability, Environment and Blue Economy of the Andalusian Regional Government.

Bibliography

BASIC BIBLIOGRAPHY

Boersma P, Kareiva P, Fagan W, et al. 2009. How Good Are Endangered Species Recovery Plans? *Bioscience* 51:643–649.

Carroll, S. P., & Fox, C. W. (Eds.). (2008). *Conservation biology: evolution in action*. Oxford University Press.

Hunter Jr, M. L., & Gibbs, J. P. 2021. *Fundamentals of conservation biology*. John Wiley & Sons.

Pimentel J 2002. Biological invasions. Economic and environmental costs of alien plant, animal and microbe species. CRC Press.

Primack, R.B. & Vidal, O. 2020. Introducción a la biología de la conservación. Fce (Fonde de la Cultura Económica.), Colombia.

Robinson, A. P., Walshe, T., Burgman, M. A., & Nunn, M. (Eds.). 2017. *Invasive species: Risk assessment and management*. Cambridge University Press.

Root, T. L., Hall, K. R., Herzog, M. P., & Howell, C. A. (Eds.). 2019. *Biodiversity in a changing climate: linking science and management in conservation*. University of California Press.

FURTHER READING

Anderson A. 2006. Applying nature's corridors design. *Corridors as a strategy for biodiversity conservation*. Columbia U.P., USA.

Bacchetta, G. et al. 2008. Conservación ex situ de plantas silvestres. *Obra Social La Caixa y Gobierno*

del Principado de Asturias.

Bañares et al. 2004. Atlas y Libro Rojo de la Flora Vascular Amenazada de España. Ministerio de Medio Ambiente. Secretaría de Estado para la Conservación de la Biodiversidad.

Barthlott W, Hostert A, Kier G, Kueper W, Kreft H, Mutke J, Rafiqpoor MD & Sommer JH. 2007. Geographic patterns of vascular plant diversity at continental to global scales. *Erdkunde* 61: 305-315.

Blanca, G., Cabezudo, B., Hernández-Bermejo, E., Herrera, C.M., Molero, J., Muñoz, J. & Valdes, B. 1999. Libro Rojo de la Flora Silvestre Amenazada de Andalucía. Tomo II: Especies Vulnerables. Ed. Consejería de Medio Ambiente. Junta de Andalucía.

Methodology

General clarifications on the methodology (optional)

The practical activities will be carried out mainly by field activities, visits and excursions.

Methodological adaptations for part-time students and students with disabilities and special educational needs

The field practices that will be optional for students with special necessities. For students with special educational needs the teacher will meet with the pupils affected to establish the most appropriate adaptations for each particular case, following the indications of the report issued by the Inclusive Education Unit.

Face-to-face activities

Activity	Large group	Medium group	Total
<i>Field trips</i>	-	27	27
<i>Oral communication activities</i>	5	-	5
<i>Projects based on the course contents</i>	10	-	10
<i>Reading comprehension, listening, visual, etc. activities</i>	10	-	10
<i>Summary and consolidation activities</i>	8	-	8
Total hours:	33	27	60

Off-site activities

Activity	Total
<i>Information processing activities</i>	60
<i>Information search activities</i>	30
Total hours	90

Results of the training and learning process

Knowledge, competencies and skills

C02	Identifies animal and plant species as part of our country"s natural resources, and their adaptation and conservation
COM03	Manage information
COM04	Interpret data qualitatively and/or quantitatively
COM12	Demonstrate the use and mastery of a foreign language
COM25	Respect human and fundamental rights, as well as democratic principles and values
COM26	Contribute to the achievement of the Sustainable Development Goals
HD10	Is able to use and interpret cartography at various scales

Assessment methods and instruments

Intended learning outcomes	Examination	Oral means	Students assignments
<i>C02</i>	X		
<i>COM03</i>		X	
<i>COM04</i>	X		X
<i>COM12</i>		X	
<i>COM25</i>	X		
<i>COM26</i>	X		
<i>HD10</i>			X
Total (100%)	70%	20%	10%
Minimum grade (*)	5	5	5

(*)Minimum mark (out of 10) needed for the assessment tool to be weighted in the course final mark. In any case, final mark must be 5,0 or higher to pass the course.

General clarifications on instruments for evaluation:

General clarifications on instruments for evaluation: theoretical exam 70%, oral activities 20%, students' assignments 10%.

Oral activities consist in question that the teacher will made to the student when they are working with a given topic. Students must prepare the responses for the next week and explain in the class why they propose these response, where they have looked for the information and to propose actions and ideas about the restoration and conservation issues.

Sudents assignments consist in each student will be assign a topic about the real actions on restoration and conservation plans in a area of Andalusia. They must made a short work about and give to the teacher to be evaluated.

Clarifications on the methodology for part-time students and students with disabilities and special educational needs:

Field excursions will be optional for part-time students. Other methodological adaptations for part-time students will be decided in meetings between the teaching staff and the students concerned in order to personalise the possible cases that may arise.

Clarifications on the evaluation of the extraordinary call and extra-ordinary call for completion studies:

Marks of the diferent parts will be saved for next courses.

Qualifying criteria for obtaining honors:

The criteria will be those proposed by the UCO regulation. Minimum mark: 9.

Sustainable development goals

Good health and well-being
Clean water and sanitation
Sustainable cities and communities
Responsible consumption and production
Climate action
Life on land

Other Faculty

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The methodological strategies and the evaluation system contemplated in this Teaching Guide will respond to the principles of equality and non-discrimination and must be adapted according to the needs presented by students with disabilities and special educational needs in the cases that are required. Students must be informed of the risks and measures that affect them, especially those that may have serious or very serious consequences (article 6 of the Safety, Health and Welfare Policy; BOUCO 23-02-23).
