Information about the subject

Degree: Bachelor of Degree in Marine Sciences

Faculty: Faculty of Veterinary Medicine and Experimental Sciences

Code: 270206 **Name:** Protected Areas and Recovery of Species

Credits: 6,00 **ECTS Year:** 2, 3, 4 **Semester:** 1

Module: Optional Itinerary: Marine Biology, Optional Itinerary: Marine Environment Management

Subject Matter: Protected Areas and Recovery of Species **Type:** Elective

Department: Oceanography and Environment

Type of learning: Classroom-based learning

Languages in which it is taught: English

Lecturer/-s:

OPM9	Pablo Jose Sanchis Benlloch **(English Responsible Lecturer)**	pj.sanchis@ucv.es

Module organization

Optional Itinerary: Marine Biology

Subject Matter	ECTS	Subject	ECTS	Year/semester
R+D in Marine Sciences	6,00	R&D in Marine Sciences	6,00	0, 2, 3, 4/1
Biology of Cetaceans	6,00	Cetaceans Biology	6,00	0, 2, 3, 4/1
Ichthyology	6,00	Ichthyology	6,00	0/1
Aquariology	6,00	Aquariology	6,00	0/1
Bioindicators	6,00	Bioindicators	6,00	0, 2, 3, 4/1
Protected Areas and Recovery of Species	6,00	Protected Areas and Recovery of Species	6,00	2, 3, 4/1
Clinic and Health of Aquatic Animals	6,00	Clinical Treatment and Healthcare of Aquatic Animals	6,00	0, 3, 4/1

Optional Itinerary: Marine Environment Management

Subject Matter	ECTS	Subject	ECTS	Year/semester
Marine Environment Geography	6,00	Geography of the marine environment	6,00	3/1
Marine Engineering	6,00	Maritime Engineering	6,00	0/1
Evaluation of Environmental Impact	6,00	Assessment of Environmental Impact	6,00	0, 2, 3, 4/1

Natural and Anthropic Risks in the Marine Environment	6,00	Natural and Anthropic Risks in the marine environment	6,00	2/1
Environmental Education	6,00	Environmental Education	6,00	2, 3, 4/1
Renewable Energies and Marine Mineral Resources	6,00	Renewable energies and marine mineral resources	6,00	This elective is not offered in the academic year 25/26

Recommended knowledge

No prerequisites

Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

R1 The student distinguishes the different concepts and recognizes their application in the matter.

R2 The student is able to prepare documents from the material used in the theoretical classes.

R3 The student recognises the different categories of classification of protected natural areas and their application in the natural environment.

R4 The student can use the most important concepts and methodological strategies related to the conservation and management of protected natural spaces.

R5 The student is able to assess the degree of threat to habitats and species and its consequences on natural and socio-economic systems.

R6 The student employs legislation on habitat and species recovery.

R7 The student argues with rational criteria from his work.

Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB3	Students are able to collect and interpret relevant data (generally in their field of study) and give opinions that involve reflection on relevant social, scientific or ethical issues.				x
CB5	Students develop the necessary learning skills to undertake further studies with a high level of autonomy.				x

GENERAL		Weighting			
		1	2	3	4
CG1	Capacity to analyze and synthesize				x
CG2	Capacity to organize and plan			x	
CG6	Capacity to manage information (capacity to look for and analyze information coming from different types of sources)				x
CG7	Decision making			x	
CG8	Capacity to work in interdisciplinary and multidisciplinary team				x
CG10	Critical and self-critical capacity				x
CG11	Capacity to learn			x	
CG12	Capacity to adapt to new situations				x
CG16	Capacity to apply theoretical knowledge				x
CG17	Research skills				x

CG18	Sensibility to environmental issues.				x

SPECIFIC		Weighting			
		1	2	3	4
CE5	Applying marine environment use planning techniques as well as resource sustainable management				x
CE6	Applying marine instrument techniques				x
CE8	Identifying and analyzing new problems and proposing solution strategies				x
CE9	Knowing how to carry out experiments and measurements both in the laboratory and during sample collection				x
CE11	Knowing how to do fieldwork and laboratory experiments in a safe and responsible way, promoting teamwork				x
CE22	Practical experience of methods of marine environmental impact assessment				x

Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R3, R4, R7	50,00%	Written test with theoretical and practical questions
R2, R3, R5, R6	40,00%	Delivery of guided assignments, whose objectives and contents will be proposed by the teacher
R2, R7	10,00%	Oral presentation

Observations

This course is not eligible for single evaluation. According to the general evaluation and qualification regulations, the preferred evaluation system will be by means of continuous evaluation. Specifically: The item, 'Delivery of assignments whose objectives and contents will be proposed by the teacher' will follow a continuous assessment that will be developed through activities and work (individual and group) throughout the semester.
Attendance at practical sessions is mandatory.
The final grade is calculated using the average obtained between the different percentages of each evaluation system. A minumum of 5 over 10 must be obtained in each of the different evaluation systems.
The use of artificial intelligence (AI)-based tools is subject to the discretion of the teacher, who may establish specific limits or conditions depending on the training or assessment activity.

MENTION OF DISTINCTION:
In accordance with the regulations governing the assessment and grading of subjects in force at UCV, the distinction of "Matrícula de Honor" (Honours with Distinction) may be awarded to students who have achieved a grade of 9.0 or higher. The number of "Matrículas de Honor" (Honours with Distinction) may not exceed five percent of the students enrolled in the group for the corresponding academic year, unless the number of enrolled students is fewer than 20, in which case a single "Matrícula de Honor" (Honours with 9 Distinction) may be awarded. Exceptionally, these distinctions may be assigned globally across different groups of the same subject. Nevertheless, the total number of distinctions awarded will be the same as if they were assigned by group, but they may be distributed among all students based on a common criterion, regardless of the group to which they belong. The criteria for awarding "Matrícula de Honor" (Honours with Distinction) will be determined according to the guidelines stipulated by the professor responsible for the course, as detailed in the "Observations" section of the evaluation system in the course guide.

Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

M1 Teacher presentation of contents, analysis of competences, explanation and in-class display of skills, abilities and knowledge.

M2 Group work sessions supervised by the professor. Case studies, diagnostic tests, problems, field work, computer room, visits, data search, libraries, on-line, Internet, etc. Meaningful construction of knowledge through interaction and student activity.

M4 Supervised monographic sessions with shared participation.

M5 Application of multidisciplinary knowledge.

M6 Personalized and small group attention. Period of instruction and/or guidance carried out by a tutor to review and discuss materials and topics presented in classes, seminars, readings, papers, etc.

M8 Set of oral and/or written tests used in initial, formative or additive assessment of the student.

M9 Group preparation of readings, essays, problem-solving, seminars, papers, reports, etc. to be presented or submitted in theoretical , practical and/or small-group tutoring sessions. Work done on the university e-learning platform (www.plataforma.ucv.es)

M10 Student's study: Individual preparation of readings, essays, problem-solving, seminars, papers, reports, etc. to be presented or submitted in theoretical, practical and/or small-group tutoring sessions. Work done on the university e-learning platform (www.plataforma.ucv.es).

IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
ON-CAMPUS CLASS M1	R1, R2, R3, R4, R6, R7	30,00	1,20
PRACTICAL CLASSES M2	R1, R2, R3, R4, R5, R6, R7	20,00	0,80
SEMINAR M4	R2, R3, R4, R6, R7	3,00	0,12
GROUP PRESENTATION OF ASSIGNMENTS M5	R3, R4, R5, R7	2,00	0,08
TUTORIAL M6	R7	3,00	0,12
ASSESSMENT M8	R1, R2, R3, R5, R6, R7	2,00	0,08
TOTAL		**60,00**	**2,40**

LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
GROUP WORK M9	R2, R3, R4, R5, R6	20,00	0,80
INDEPENDENT WORK M10	R1, R2, R3, R4, R5, R6, R7	70,00	2,80
TOTAL		**90,00**	**3,60**

Description of the contents

Description of the necessary contents to acquire the learning outcomes.

Theoretical contents:

Content block	Contents
Unit 1. PROTECTED NATURAL PARKS AND THE MANAGEMENT FOR ITS CONSERVATION.	Natural Protected Areas (ENP). Conservation of the ENP in the international, national and regional context. Management, panning and public uses of the ENP.
Unit 2. PROTECTED MARINE AREAS	Requirements for an area to be clasified as marine protected area. Protection categories: Marine Protected Areas, international figures of protection, marine areas protected by the network Natura 2000 and fishing interest zone. General management of marine protected areas.
Unit 3. RECOVERY OF THREATENED SPECIES. SPECIES RECOVERY CENTERS	General tools for the recovery of threatened species. Structure of the action plans: Analysis of the situation about the species to be conserved, conservation and application guidelines of a threatened species.

Organization of the practical activities:

	Content	Place	Hours
PR1.	Technical visits aligned with the blended mobility activities	Technical visit	8,00

Temporary organization of learning:

Block of content	Number of sessions	Hours
Unit 1. PROTECTED NATURAL PARKS AND THE MANAGEMENT FOR ITS CONSERVATION.	10,00	20,00
Unit 2. PROTECTED MARINE AREAS	10,00	20,00
Unit 3. RECOVERY OF THREATENED SPECIES. SPECIES RECOVERY CENTERS	10,00	20,00

References

Claudet, J., & Guidetti, P. (2010). Improving assessments of marine protected areas. Aquatic conservation marine and freshwater ecosystems.
Concepción, E. D. (2020). Urban sprawl into Natura 2000 network over Europe. Conservation Biology.
De Koning, J., Winkel, G., Sotirov, M., Blondet, M., Borras, L., Ferranti, F., & Geitzenauer, M. (2014). Natura 2000 and climate change—polarisation, uncertainty, and pragmatism in discourses on forest conservation and management in Europe. Environmental science & policy, 39, 129-138.
Gaston, K. J., Jackson, S. F., Nagy, A., Cantú-Salazar, L., & Johnson, M. (2008). Protected areas in Europe: principle and practice. Annals of the New York Academy of Sciences, 1134(1), 97-119.
Gianni, F., Bartolini, F., Airoldi, L., Ballesteros, E., Francour, P., Guidetti, P., ... & Mangialajo, L. (2013). Conservation and restoration of marine forests in the Mediterranean Sea and the potential role of Marine Protected Areas. Advances in oceanography and limnology, 4(2), 83-101.
Hermoso, V., Morán-Ordóñez, A., & Brotons, L. (2018). Assessing the role of Natura 2000 at maintaining dynamic landscapes in Europe over the last two decades: implications for conservation. Landscape Ecology, 33(8), 1447-1460.
Maestro, M., Pérez-Cayeiro, M. L., Chica-Ruiz, J. A., & Reyes, H. (2019). Marine protected areas in the 21st century: Current situation and trends. Ocean & Coastal Management, 171, 28-36.
Mazaris, A. D., Kallimanis, A., Gissi, E., Pipitone, C., Danovaro, R., Claudet, J., ... & Fraschetti, S. (2019). Threats to marine biodiversity in European protected areas. Science of the Total Environment, 677, 418-426.
Solandt, J. L., Mullier, T., Elliott, S., & Sheehan, E. (2020). Managing marine protected areas in Europe: Moving from 'feature-based'to 'whole-site'management of sites. In Marine Protected Areas (pp. 157-181). Elsevier.
Zhenshan, L., & Shuguang, W. (2002). Study on the relations between the animal species extinction and habitat destruction. Acta Ecologica Sinica, 22(4), 535-540.

WEBPAGES
https://ec.europa.eu/environment/index_en
http://parquesnaturales.gva.es
http://www.europarc-es.org/
http://www.mma.es
http://www.ramsar.org
http://www.unesco.org http://ec.europa.eu/environment/index_es.htm
http://www.iucn.org/es/
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