

**1. General information**

Course: PLANNING AND MANAGEMENT OF PROTECTED NATURAL AREAS
Type: ELECTIVE
Degree: 340 - UNDERGRADUATE DEGREE PROGRAMME IN ENVIRONMENTAL SCIENCES
Center: 501 - FACULTY OF ENVIRONMENTAL SCIENCES AND BIOCHEMISTRY
Year: 4
Main language: Spanish
Use of additional languages: English
Web site:

Code: 37334
ECTS credits: 4.5
Academic year: 2019-20
Group(s): 40
Duration: First semester
Second language:
English Friendly: Y
Bilingual: N

Lecturer: FEDERICO FERNANDEZ GONZALEZ - Group(s): 40				
Building/Office	Department	Phone number	Email	Office hours
Edificio Sabatini, Despacho 0.24	CIENCIAS AMBIENTALES	925265753	federico.fdez@uclm.es	Martes, miércoles y jueves de 13:00 a 15:00. Para otras horas, previa cita por correo electrónico.
Lecturer: JESUS ROJO UBEDA - Group(s): 40				
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2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

Protected areas constitute a basic and classic tool in the strategies of *in situ* conservation of the natural heritage (biodiversity and geodiversity), that currently are being applied to more than 25% of the Spanish territories under different legal categories. The management of the protected areas and the socio-economic activities related to them are professional sectors offering relevant employment prospects for graduates in environmental sciences. This subject deepens in training on this strategy, whose basic elements were introduced in the previous subject on Conservation Biology. The specific objectives are to present the theory on the conception, design, typology and legal regimes of the protected areas, and to develop the instruments and criteria for their planning and management in the scientific framework of conservation biology and in the regional, national and European administrative spheres.

4. Degree competences achieved in this course**Course competences**

Code	Description
E01	Ability to understand and apply basic knowledge.
E02	Capacity for multidisciplinary consideration of an environmental problem
E03	Awareness of the temporal and spatial dimensions of environmental processes
E04	Ability to integrate experimental evidence found in field and/or laboratory studies with theoretical knowledge.
E05	Capacity for qualitative data interpretation
E06	Capacity for quantitative data interpretation
E07	Capacity to plan, manage and conserve natural resources
E08	Ability to value goods, services and natural resources economically
E09	Capacity to analyze the exploitation of resources in the context of sustainable development
E13	Ability to handle software.
E14	Capacity to design and apply sustainability indicators
E18	Capacity to manage the natural environment
E19	Capacity to carry out integrated spatial planning and development
G01	Proficiency in a second foreign language at level B1 of the Common European Framework of Reference for Languages.
G02	Knowledge of Information and Communication Technologies (ICT).
G03	Good oral and written communication
G04	Ethical commitment and professional deontology

5. Objectives or Learning Outcomes**Course learning outcomes****Description**

Ability to diagnose the state of a conservation objective and analyse the causes that determine it.
Ability to design and carry out monitoring in protected areas.
Capacity to intervene in the design of conservation programmes and implement measures to prevent the extinction of populations, species and habitats.
Capacity to intervene in the design of networks of protected areas.
Ability to participate in the development of natural resource management plans and protected area management plans.
Collaborate and cooperate in multidisciplinary teams.
Knowledge of the causes and dimensions of biodiversity loss.

Knowledge of the purposes and functions of protected natural areas within the framework of conservation strategies.
 Knowledge of the legal system, planning instruments, characteristics and current status of the management of protected areas in Spain.
 Critically analyze the effects of different management proposals.
 Learn to critically value different opinions.
 Design and implement the most appropriate management strategy according to known circumstances.
 Management of conservation objectives and prioritization criteria.
 Organize your work and face any difficulties that may arise in an autonomous and creative way.

6. Units / Contents

Unit 1: Introduction to Protected Areas

Unit 1.1 Concept of protected area, conservation targets and protection modalities, types of protected areas

Unit 1.2 Criteria for prioritization of conservation targets applied to the design of protected areas

Unit 1.3 Criteria for area selection and design of protected areas

Unit 2: Legislation on protected areas

Unit 2.1 European Directives: the Habitats Directive and the Natura 2000 Network

Unit 2.2 Legislation on protected areas in Spain

Unit 2.3 Legislation in Spanish Autonomous Communities: Castilla-La Mancha

Unit 2.4 International conventions on protected areas

Unit 2.5 Administration structure of a protected area: governing bodies, consultation and participation bodies

Unit 3: Planning and management instruments in protected areas

Unit 3.1 Plans for natural resource management (PORN), Management Plans (PRUG), Sectorial and Special Plans

Unit 3.2 Working on management plans: inventory, diagnostic, definition of management targets and measures. Zonification. Public use, environmental education and research in protected areas

Unit 4: The Spanish network of protected areas. Protected areas in Castilla-La Mancha

Unit 5: Introduction to the design of monitoring of the management and the state of conservation in protected areas

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	R	Description
Class Attendance (theory) [ON-SITE]	Lectures	E01 E02 E03 E04 E05 E06 E07 E08 E09 E14 E18 E19 G01 G02 G03 G04	0.68	17	Y	N	N	Exhibitions of the units of the subject, whose presentations, bibliography, complementary readings and questions will be available for the student in the virtual platform
Class Attendance (practical) [ON-SITE]	Practical or hands-on activities	E01 E02 E03 E04 E05 E06 E07 E13 E14 E18 E19 G01 G02 G03 G04	0.8	20	Y	Y	N	Laboratory practices combining individual and team work. An analysis and review of the characteristics, planning and management status of a protected area of Castilla-La Mancha will be developed, using a pre-defined form, and computer programs will be managed for the design and selection of protected areas based on analysis of complementarity (Zonation), as well as for the evaluation of the impacts of climate change on the future distribution of conservation targets (Maxent). Optionally, voluntary working visits may be carried out to some regional protected areas
Workshops or seminars [ON-SITE]	Case Studies	E01 E02 E03 E04 E05 E06 E07 E08 E09 E13 E14 E18 E19 G01 G02 G03 G04	0.24	6	Y	N	N	One or two sessions for each theory topic will be devoted to the discussion on issues and cases previously raised by the teacher, as well as to the group supervision of the voluntary course project
Writing of reports or projects [OFF-SITE]	Guided or supervised work	E01 E02 E03 E04 E05 E06 E07 E13 E14 E18 E19 G01 G02 G03 G04	0.8	20	Y	N	N	Preparation of individual or team volunteer projects, consisting of reviews of different aspects of the design, planning and management of a protected area, according to a previous script that includes the corresponding topics of the subject program
Practicum and practical activities report writing or preparation [OFF-SITE]	Guided or supervised work	E01 E02 E03 E04 E05 E06 E07 E13 E14 E18 E19 G01 G02 G03 G04	0.7	17.5	Y	Y	Y	Preparation of the internship report, which includes a part of individual work and another part of teamwork. The evaluation of the subject laboratory practices

Final test [ON-SITE]	Assessment tests	E01 E02 E03 E04 E05 E06 E07 E08 E09 E18 E19 G03 G04	0.08	2	Y	Y	Y	will be based in this report. Written test based on problem questions or cases, whose response requires linking arguments related to the different topics covered in the subject. The student can consult the printed or handwritten documentation that he brings with him to the test
Study and Exam Preparation [OFF-SITE]	Self-study	E01 E02 E03 E04 E05 E06 E07 E08 E09 E13 E14 E18 E19 G01 G02 G03 G04	1.2	30	N	-	-	Autonomous work of the student: study of presentations and recommended bibliography, resolution of exercises and case studies, preparation of tests, etc.
Total:			4.5	112.5				
Total credits of in-class work: 1.8			Total class time hours: 45					
Total credits of out of class work: 2.7			Total hours of out of class work: 67.5					

As: Assessable training activity

Com: Training activity of compulsory overcoming

R: Rescheduling training activity

8. Evaluation criteria and Grading System			
Evaluation System	Grading System		Description
	Face-to-Face	Self-Study Student	
Final test	40.00%	0.00%	Evaluation criteria: adequacy and originality of the argumentation and the reasoning of the answers; clarity, correctness and organization of the answers
Practicum and practical activities reports assessment	30.00%	0.00%	Evaluation criteria: adequacy of the reports to the corresponding scripts and forms; correction and clarity in the writing and presentation of the results obtained; coordination in the cases of teamwork
Theoretical papers assessment	25.00%	0.00%	Evaluation criteria: adequacy of the report structure to the established script; adequacy and completeness of the sources of information consulted; correction and relevancy of the references; precision and clarity of the writing; coordination within the working group
Assessment of active participation	5.00%	0.00%	Evaluation criteria: participation and initiative in the dynamics of the classes and seminars; correction in the resolution of questions and cases in the seminars; clarity and ownership in the individual exhibitions and interventions in the debates; ethical commitment
Total:	100.00%	0.00%	

Evaluation criteria for the final exam:

The weight of the final test will be increased with that of the non-compulsory evaluations (active participation in clases and seminars and preparation of voluntary projects) in case of absence of qualification of the latter. Limits will be established for the compensation between the practicum qualifications and those of the final test.

Specifications for the resit/retake exam:

Similar to those of the ordinary call. The qualification obtained in the practicum may be retained during the following academic year.

Specifications for the second resit / retake exam:

Similar to those of the resit/retake call.

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours
Final test [PRESENCIAL][Assessment tests]	2
Unit 1 (de 5): Introduction to Protected Areas	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	8
Workshops or seminars [PRESENCIAL][Case Studies]	1
Unit 2 (de 5): Legislation on protected areas	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	2
Workshops or seminars [PRESENCIAL][Case Studies]	1
Unit 3 (de 5): Planning and management instruments in protected areas	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	8
Workshops or seminars [PRESENCIAL][Case Studies]	2
Unit 4 (de 5): The Spanish network of protected areas. Protected areas in Castilla-La Mancha	

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	2
Workshops or seminars [PRESENCIAL][Case Studies]	1
Unit 5 (de 5): Introduction to the design of monitoring of the management and the state of conservation in protected areas	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	2
Workshops or seminars [PRESENCIAL][Case Studies]	1
Global activity	
Activities	hours
Class Attendance (theory) [PRESENCIAL][Lectures]	17
Class Attendance (practical) [PRESENCIAL][Practical or hands-on activities]	20
Workshops or seminars [PRESENCIAL][Case Studies]	6
Final test [PRESENCIAL][Assessment tests]	2
Total horas: 45	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	City	ISBN	Year	Description
UNEP-WCMC	State of the world's protected areas: an annual review of global conservation progress Información sobre las áreas protegidas de Castilla-La Mancha ¿ http://pagina.jccm.es/medioambiente/espacios_naturales/indexrapcm.htm Web Revista Medio Ambiente en Castilla-La Mancha http://www.revistamedioambiente.jccm.es/inicio.php Web de Europarc-España http://www.redeuroparc.org/que_es_europarc.jsp Web de la Agencia Ambiental Europea (EEA) http://www.eea.europa.eu/themes Web de la UICN http://www.iucn.org/ Web de la World Database on Protected Areas (WDPA) http://www.wdpa.org/Default.aspx Web del Organismo Autónomo Parques Nacionales (OAPN) http://www.magrama.gob.es/es/parques-nacionales-oapn/default.aspx Web sobre conservación de la biodiversidad del Ministerio de Agricultura, Alimentación y Medio Ambiente http://www.magrama.gob.es/es/biodiversidad/temas/default.aspx	UNEP-WCMC	Cambridge		2008	Información y documentación sobre espacios protegidos en España
Consejería de Agricultura	Planes de gestión de los espacios de la Red Natura 2000 en Castilla-La Mancha					portal web en elaboración
Dudley N (Ed)	Guidelines for applying protected area management categories	IUCN	Gland (Switzerland)		2008	
EUROPARC-España	Anuario 2011 del estado de las áreas protegidas en España	Fundación Fernando González Bernáldez	Madrid		2012	
EUROPARC-España	Diseño de planes de seguimiento en espacios naturales protegidos. Manual para gestores y técnicos	Fundación Fernando González Bernáldez	Madrid		2005	
Europarc-España	Planificar para gestionar los espacios naturales protegidos	Fundación Fernando González Bernáldez	Madrid		2008	
Europarc-España	Procedimiento de asignación de las categorías de manejo UICN a los espacios naturales protegidos	Fundación Fernando González Bernáldez	Madrid		2008	
Fernández-González F., Pérez Badia M.R., Sardinero S., Rodríguez Torres A. & Crespo G.	Espacios naturales protegidos y cambio climático en Castilla-La Mancha	Fundación General de Medio Ambiente de Castilla-La	Toledo		2009	

García Fernández-Velilla S.	Guía metodológica para la elaboración de los planes de gestión de los lugares Natura 2000 en Navarra	Mancha Gestión Ambiental, Viveros y Repoblaciones de Navarra S.A.	Pamplona	2003
Mulero Mendigorri A.	La protección de espacios naturales en España	Mundi-Prensa		2002
Ruiz R. & Serrano C. (Eds)	La Red Natura 2000 en Castilla-La Mancha	Junta de Comunidades de Castilla-La Mancha	Toledo	2009