



Universitat de Lleida

DEGREE CURRICULUM

WILDLIFE MANAGEMENT

Coordination: NADAL GARCIA, JESUS

Academic year 2020-21

Subject's general information

Subject name	WILDLIFE MANAGEMENT			
Code	102432			
Semester	1st Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Character	Modality
	Double degree: Bachelor's degree in Forest Engineering and Bachelor's degree in Nature Conservation	3	COMPULSORY	Attendance-based
	Bachelor's Degree in Forest Engineering	3	COMPULSORY	Attendance-based
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	Activity type	PRALAB	PRAULA	TEORIA
	Number of credits	1	2	3
	Number of groups	8	2	1
Coordination	NADAL GARCIA, JESUS			
Department	ANIMAL HUSBANDRY			
Important information on data processing	Consult this link for more information.			
Language	Català: 50% Castellà: 50%			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
CASALS MARTI, FREDERIC	frederic.casals@udl.cat	7,5	
NADAL GARCIA, JESUS	jesus.nadal@udl.cat	7,5	

Subject's extra information

Teaching guide of "Wildlife Management"

Wildlife and its habitats. The sustainable use of wild animal populations. Diagnostics on populations and habitats. Measures to conserve and recover populations and their habitats.

Requirements

Prerequisites: Ecology, Plant Ecophysiology and Forest Zoology.

Recommendations

Material for field trips: wildlife identification guides and binoculars

Learning objectives

Goals

1. Identify the impacts of human activity on wildlife and their habitats
2. Analyze and diagnose wildlife populations and their habitats
3. Elaborate hunting and fish management plans
4. Develop wildlife conservation projects and their habitats

Competences

Competencies

General skills

CB1. Possess and understand basic and cutting-edge knowledge about wildlife and its habitats.

CB2. Technical capacity for the preparation and defense of management actions. Positive attitude to solve wildlife management problems.

CB3. Talent to gather and interpret relevant data, analyze and reflect on it to make technical judgments.

CB4. Ability to transmit information, ideas, problems and solutions to the public.

CB5. Autonomy and self-sufficiency to prepare studies and reports.

CG1. Ability to understand the biological, chemical, physical, mathematical and representation systems necessary

for the development of professional activity, as well as to identify the different biotic and physical elements of the forest environment and renewable natural resources susceptible to protection, conservation and exploitations in the forest area.

CG2. Ability to analyze the ecological structure and function of forest systems and resources, including landscapes.

CG3. Knowledge of degradation processes that affect forest systems and resources (pollution, pests and diseases, fires, etc.) and capacity for the use of forest environment protection techniques, forest hydrological restoration and biodiversity conservation.

CG7. Ability to solve technical problems derived from the management of natural spaces.

CG8. Capacity to manage and protect forest fauna populations, with special emphasis on hunting and fish populations.

CG13. Ability to design, direct, elaborate, implement and interpret projects and plans, as well as to write technical reports, recognition reports, assessments and appraisals.

CG17. Domain of Information and Communication Technologies

CG18 Regarding the fundamental rights of equality between men and women, to the promotion of human rights and the values of a culture of peace and democratic values

Specific competences

1. Know the European, state and regional legislation on wildlife.
2. Master the techniques of hunting and fish farming management.
3. Understand wildlife management strategies and their habitats.
4. Ability to recover populations and their habitats.
5. Ability to develop conservation techniques for fauna and habitats.

Subject contents

Temary

1. Species and Legislation

Biodiversity: Concept and importance. Categorization of the conservation status of the species. Vertebrate threatened from Spain. Legislation related to fauna: Main directives of the European Union, state and autonomous legislation.

2. Aquatic Ecosystems

Type of aquatic ecosystems and distribution. Rivers: hydrological and physicochemical characteristics.

3. Aquatic Ecosystems

Biological communities: The riparian forest, macrophyte algae communities, and aquatic macroinvertebrates.

4. Fish communities

Ichthyofauna Iberian: Species and fluvial regions. Zonation of the fish communities. Fish communities Regulation of fish communities: biotic and abiotic factors.

5. Technical plans for fish management

Management of continental fisheries. Effects of fishing on communities. Fish farms and repopulations.

6. Rivers Management

Methods of evaluation of the state of the rivers. Restoration Measures. Stairs and steps of fish.

7. Terrestrial Ecosystems

Biomes and biogeographic regions. Organization and production in different ecosystems.

8. Dynamics of animal populations

The abundance, its fluctuations and the relation with the habitat. Annual and interannual cycles.

9. Regulation of animal populations

Factors that regulate the size of the population. Models of regulation of the size of the population.

10. Census of animal populations

Methods of quantifying the abundance of wild fauna. Census design and objectives. Analysis and interpretation of the data.

11. Extractions of the Animal Populations

The population surpluses and their use. The maximum-sustainable catches. Harvesting strategies.

12. Forest management and animal populations

Impacts of silviculture, harvesting and forest management on wildlife. The ecocompatibility of forestry operations. The conservation of the forest.

Practical activities

Laboratory practices

1. Determination of aquatic macroinvertebrates. Use of biological indexes
2. Study of continental fishes
3. Bird study techniques
4. Mammalian study techniques

Field practices

1. Techniques of work in a river
2. Management of a hunting ground

Methodology

Methodology

Type of activity	Description	Presential training		Distance training			Total time
		Objectives	Hours	Student work	Hours	Teacher	Hours

Master lesson	Topic 1-5	Explanation of the main concepts	10	knowing, understanding and synthesizing knowledge	10	Dr. Casals	20h/2
Problems and cases	Topic 1-5	Resolution of cases	6	Learning to solve problems and cases	6	Dr. Casals	12h/1.2
Master lesson	Topic: 7-10	Explanation of the main concepts	8	knowing, understanding and synthesizing knowledge	8	Dr. Nadal	16h/1.6
Problems and cases	Topic: 7-10	Resolution of cases	4	Learning to solve problems and cases	4	Dr. Nadal	8h/0.8
Laboratory	Laboratory practice: 1 i 2	Understand and identify	4	Report	4	Dr. Casals	8h/0.8
Laboratory	Laboratory practice: 3 i 4	Understand and identify	4	Report	4	Dr. Nadal	8h/0.8
Informatics	Topic: 5	Applied learning and execution	4	Report	4	Dr. Nadal	8h/0.8
Field practice	Field practice: 1	Understand and identify	6	Report	6	Dr. Casals	12h/1.2
Field practice	Field practice: 2	Understand and identify	6	Report	6	Dr. Nadal	12h/1.2
Directed activities	Student's work in groups of 6 students	Guiding the student at work (during tutorials)	8	Results of the inventory and ecological characterization	38	Dr. Casals Dr. Nadal	46h/4.6
Totals			60		90		150h/6

Observations

The different sessions of exposure, case resolution, computer practices, laboratory practices and field practices, are developed in large group, medium group (24 students) and small group (3 students). Students have to support both their individual work and their group work, achieving the objectives. Both the individual work and the group work of the student count for each student in face to face and distance training.

Observaciones

Las distintas clases de exposición, resolución de casos, prácticas informáticas, prácticas de laboratorio y prácticas de campo, se desarrollan en grupo grande, grupo mediano (24 alumnos) y grupo pequeño (3 alumnos). Los estudiantes tienen que apoyar tanto con su trabajo individual como con su trabajo en grupo, la consecución de los objetivos. Ambos el trabajo individual como el trabajo grupal del alumno se contabilizan para cada estudiante en las actividades presenciales y no presenciales.

Evaluation

Evaluation system

Activity	Evaluation activity		Mark (%)
	Process	Number	
Master lesson	Written tests on the content of the subject	2	40%
Laboratory	Assistance and participation	4	10%
Field	Assistance and participation	2	10%
Directed activities	Oral presentation	1	40%
Total			100

Observations

The written test is to demonstrate that you know, understand and know how to synthesize the concepts and subjects of the program.

The group work poses and solves a problem of wildlife management, which is evaluated with a defense and public exposure of the case studied.

The lack of understanding of the basic concepts implies that the evaluation process has not been passed.

Bibliography

Bibliografía básica

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LUCIO, A.; SÁENZ, M.; PURROY, F. 1992. Determinación del sexo y la edad en las especies cinegéticas. Diputación de Álava. Vitoria.

PIANKA, E.R. 1982. Ecología evolutiva. Omega. Barcelona.

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