Universitat de Lleida

DEGREE CURRICULUM

INTEGRATED PRACTICES III

Coordination: NADAL GARCIA, JESUS

Academic year 2023-24

INTEGRATED PRACTICES III 2023-24

Subject's general information

Subject name	INTEGRATED PRACTICES III
Code	102436
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION
Typology	

Degree	Course	Character	Modality
Bachelor's Degree in Forest Engineering	3	COMPULSORY	Attendance-based
Double degree: Bachelor's degree in Forest Engineering and Bachelor's degree in Nature Conservation	3	COMPULSORY	Attendance-based

Course number of credits (ECTS)	6
Type of activity, credits, and groups	

Activity type	PRACAMP	PRALAB	PRAULA	TEORIA
Number of credits	1	2	2	1
Number of groups	4	3	1	1

Coordination	NADAL GARCIA, JESUS
Department	ANIMAL SCIENCE
Important information on data processing	Consult this link for more information.

INTEGRATED PRACTICES III 2023-24

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
AUNOS GOMEZ, ALVARO IGNACIO	alvaro.aunos@udl.cat	5,1	
COLL MIR, LLUIS	lluis.coll@udl.cat	1,9	
JUAREZ ESCARIO, ALEJANDRO	alejandro.juarez@udl.cat	,7	
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OLIVA PALAU, JONAS	jonas.oliva@udl.cat	1,4	
VILLASANTE PLAGARO, ANTONIO M.	antonio.villasante@udl.cat	1,7	

Subject's extra information

Course / subject in the whole curriculum

Practical group work that integrates forest management, exploitation and management matters considering the defense of the forest and the use of natural resources

Executed progressively in the phases:
1. Study of historical documentation
2. Field work
3. Data analysis to produce results
4. Presentation of management proposal

Requirements to take it

Prerequisites: Integrated Practices I and II, Second Year
Corequisites: Third course

Recommendations
Internship material
Technical documents
Measuring instruments
Aerial photography
Field Chips

INTEGRATED PRACTICES III 2023-24

Learning objectives

Resolution of a practical case through the development of a project or technical plan for the management, improvement, prevention and use of a mountain under study. The case will be studied both in the field and in the cabinet.

- Quantify natural resources and their legal, economic, ecological status ...

- Evaluate current uses

- Plan forest management: forestry, management and exploitation

- Anticipate, prevent and solve health problems

- Develop strategies for fire prevention and extinction

- Diagnose, obtain yields and conserve non-timber resources

- Design economic balances for sustainable mountain management

Competences

Competences

CB1. That students have demonstrated to possess and understand knowledge in an area of study that starts from the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that imply knowledge from the cutting edge of your field of study

CB2. That students know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.

CB3. That students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant issues of a social, scientific or ethical nature

CB4. That students can transmit information, ideas, problems and solutions to both specialized and non-specialized audiences

CB5. That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy

CG1. Ability to understand the biological, chemical, physical, mathematical foundations and the 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 exploitation in the forestry field.

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

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

CG4. Ability to evaluate and correct the environmental impact, as well as apply environmental auditing and management techniques.

CG6. Ability to measure, inventory and evaluate forest resources, apply and develop silvicultural techniques and management of all types of forest systems, parks and recreational areas, as well as techniques for the use of

timber and non-timber forest products.

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

CG8. Ability to manage and protect populations of forest fauna, with special emphasis on those of a hunting and fish farming nature.

CG10. Ability to apply the techniques of forest management and land planning, as well as the criteria and indicators of sustainable forest management within the framework of forest certification procedures.

CG12. Ability to organize and plan companies and other institutions, with knowledge of the legislative provisions that affect them and the fundamentals of marketing and commercialization of forest products.

CG13. Ability to design, direct, prepare, implement and interpret projects and plans, as well as to write technical reports, recognition reports, evaluations, expert opinions and appraisals.

CG14. Ability to understand, interpret and adopt scientific advances in the forestry field, to develop and transfer technology and to work in a multilingual and multidisciplinary environment.

CT1. Correction in oral and written expression

CT3. Mastery of Information and Communication Technologies

CT4. Respect for the fundamental rights of equality between men and women, the promotion of Human Rights and the values of a culture of peace and democratic values

CT5. Apply the gender perspective to the functions of the professional field

CEFB6. Basic knowledge of geology and morphology of the terrain and its application in problems related to engineering. Climatology.

CEMC1. Ability to know, understand and use the principles of Forest Botany.

CEMC2. Ability to know, understand and use the principles of Forest Zoology and EntomologyCEMC4. Ability to know, understand and use the principles of Forest Ecology.

CEMC11. Ability to know, understand and use the principles of Forestry.

CEMC12. Ability to know, understand and use the principles of Dasometry and Forest Inventory.

CEMC13. Ability to know, understand and use the principles of Forest Exploitation.

CEMC17. Ability to know, understand and use the principles of Methodology, organization and project management

CEEF1. Ability to know, understand and use the principles of Pasciculture and Agroforestry Systems

CEEF2. Ability to know, understand and use the principles of Reforestation

CEEF3. Ability to know, understand and use the principles of Forest Management.

CEEF4. Ability to know, understand and use the principles of Forest Improvement

CEEF6. Ability to know, understand and use the principles of Forest Diseases and Pests

CEEF7. Ability to know, understand and use the principles of Hunting and Fishing Management. Riparian Systems.

CEEF11. Ability to know, understand and use the principles of Recovery of Degraded Spaces.

CEEF12. Ability to know, understand and use the principles of Prevention and Fight against Forest Fires

Subject contents

Agenda of the practical activity

1 - Quantify natural resources and their legal, economic and ecological status: Review and synthesis of historical documentation on natural resources inventory plots. Counting itineraries.

2 - Evaluate current uses: Review and synthesis of historical documentation on current uses.

3 - Plan forest management: forestry, management and exploitation: Analysis and interpretation of different mass structures and proposal of applicable silvicultural treatments. Management possibilities with assessment of the characteristics of the mountain, timber exploitation and associated industries

4 - Prevent and solve health problems: Identification of present health problems and evaluate future risks, incorporate health in forest management and management

5 - Fire fighting plan. Fire risk assessment, prevention measures and action strategies

6 - Non-timber resources and uses. Quantification and sustainable use of mycological, fauna and hunting resources

7 - Economic budgets. Economic valuation of the proposed actions

Methodology

Activity Type	Description	Face-to-face student activity		Non-face-to-face student activity		Total	
		Objectives	Hours	Student work	Hours	Hours	ECTS
Program Exhibition	Problem statement, integration and organization	Explanation of the objectives, materials, procedures and organization	**2**	Study, know, understand and synthesize the theoretical foundations to solve the problem	**2**	**4**	**0.4**
Quantify forest resources	Participatory and tutored sessions	Review and synthesis of historical documentation	**4**	Learn to select and synthesize	**10**	**14**	**1.4**
Seminari de aprofitament s	Participatory and tutored sessions	Evaluate current uses	**4**	Study the benefits and their sustainability	**10**	**14**	**1.4**
Planificació del treball de camp	Participatory and tutored sessions	Plan and build data collection sheets	**4**	Prepare data collection sheets	**10**	**14**	**1.4**
Execució del treball de camp	Pràctica de camp	Execution of the practice in the field: inventory	**26**	Study and analyze the data	**20**	**46**	**4.6**

Seminar on uses	Participatory and tutored sessions	Analyze, interpret, decide and elaborate proposal	**10**	Prepare technical document	**20**	**30**	**3.0**
Field practice	Field Work Planning	Rethink the proposal in the field	**8**	Study the feasibility	**20**	**28**	**2.8**
Total			**60**		**90**	**150**	**15**

Observations

Exhibition of the Integrated Practices program III: objectives, procedure and organization

Quantify forest resources in the area of study, review and synthesis of historical documentation

Seminar on the use of natural resources in the study area. Field work planning, development of measuring instruments. Execution of the field work, taken from data in the field Resolution of the case study: data analysis, elaboration and proposal ..

Rethinking the proposal in the study area

The different kinds 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 with their individual work and with their group work, the achievement of the objectives. Both the individual work and the student group work are counted for each student in the face-to-face and non-face-to-face activities.

Evaluation

Activitats

Activity tipe	Evaluation		Weight qualification
	Procedures	Number	(%)
Syntesis report	Delivery of technical document	1	**20**
Analyze report	Delivery of technical document	1	**20**
Proposal report	Delivery of technical document	1	**20**
Exposition	Oral presentation	1	**40**
Total			**100**

Observations
The oral presentation is in a group of two students, each student has to present a part of the work, the students

have to respond individually to the questions posed by the court, to demonstrate their understanding and ability in solving the proposed case. To be evaluated, it is essential to attend field trips.

Bibliography

Bibliografia bàsica

DURANTEL, P. 1993. Nuevo manual de caza. Planeta. Barcelona.

SERRADA R., MONTERO G., REQUE J. (eds), 2008. Compendio de Selvicultura Aplicada en España. INIA, Madrid. 1.178 pp.

CPF, 2004. Manual de redacció de plans tècnics de gestió i millora forestal (PTGMF) i plans simples de gestió forestal (PSGF). Instruccions de redacció i l´inventari forestal. CPF. 316 p.

Bibliografia complementària

BEGON, M.; HARPER, J.L. & TOW NSEND, C.R. 1988. Ecología, individuos, poblaciones y comunidades. Omega. Barcelona.

Tarifas de Cubicación e Inventario por Ordenador. Escuela Técnica Superior de Ingenieros de Montes. Fundación Conde del Valle de Salazar.