



Universitat de Lleida

# DEGREE CURRICULUM **INTEGRATED PRACTICES I**

Coordination: CONESA MOR, JOSEP ANTONI

Academic year 2022-23

**Subject's general information**

<b>Subject name</b>	INTEGRATED PRACTICES I			
<b>Code</b>	102423			
<b>Semester</b>	1st Q(SEMESTER) CONTINUED EVALUATION			
<b>Typology</b>	<b>Degree</b>	<b>Course</b>	<b>Character</b>	<b>Modality</b>
	Bachelor's Degree in Forest Engineering	2	COMPULSORY	Attendance-based
	Double degree: Bachelor's degree in Forest Engineering and Bachelor's degree in Nature Conservation	2	COMPULSORY	Attendance-based
<b>Course number of credits (ECTS)</b>	6			
<b>Type of activity, credits, and groups</b>	<b>Activity type</b>	PRACAMP		TEORIA
	<b>Number of credits</b>	4.8		1.2
	<b>Number of groups</b>	6		1
<b>Coordination</b>	CONESA MOR, JOSEP ANTONI			
<b>Department</b>	HORTICULTURE, BOTANY AND LANDSCAPING			
<b>Important information on data processing</b>	Consult <a href="#">this link</a> for more information.			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
ALVAREZ MORALES, DANIELA	daniela.alvarez@udl.cat	1,2	
BALTIERREZ MORAS, ANTONI	antoni.baltierrez@udl.cat	4,8	
CHOCARRO GOMEZ, CRISTINA	cristina.chocarro@udl.cat	1,25	
CONESA MOR, JOSEP ANTONI	josepantoni.conesa@udl.cat	5,6	
JUAREZ ESCARIO, ALEJANDRO	alejandro.juarez@udl.cat	1	
OLARIETA ALBERDI, JOSE RAMON	joseramon.olarieta@udl.cat	7,8	
POCH CLARET, ROSA MARIA	rosa.poch@udl.cat	1,2	
ROYO ESNAL, ARITZ	aritz.royo@udl.cat	4,4	
SANCHEZ GONZALEZ, JORGE RUBEN	jorge.sanchez@udl.cat	1,25	
SANUY CASTELLS, DELFÍ	delfi.sanuy@udl.cat	1,25	
SERRANO ENDOLZ, LUIS	luis.serrano@udl.cat	,25	

## Learning objectives

- O10. Know the main physiological processes of plants and the influence of ecological factors on them.
- O18. Know the most relevant aspects of animal and plant biology, as well as the main distribution factors.
- O19. Know the basic zoological and botanical principles, as well as the essential contents of morphology and systematics that allow you to differentiate the different models of organization, their diversity and complexity.
- O20. Identify the different biotic and physical elements of the natural environment and their interrelationships.
- O21. Understand and analyze the interactions between ecological factors that determine the structural and functional properties of ecosystems and forests, as well as their spatio-temporal organization.
- O22. Understand the importance and ecological value of the different physical and biotic elements of the natural environment.
- O23. Write technical reports, reconnaissance reports, preliminary drafts and technical programs.
- O24. Use methodologies and apply them to perform an ecological characterization of a region.
- O25. Use the usual working methodologies of Plant Ecophysiology.

## Competences

### Strategic competencies

- CE1. Correction in oral and written expression
- CE2. Mastery of Information and Communication Technologies. Specific competencies of the degree.

### Specific competences of the degree

- CE1. Basic knowledge of geology and morphology of the terrain and its application in problems related to engineering. Climatology.
- CE2. Knowledge of the biological bases and foundations of the plant and animal field in engineering.
- CE3. Forest Botany.
- CE4. Forest Zoology and Entomology.
- CE5. Physical Sciences: Geology, Climatology and Soil Science.
- CE6. Forest ecology.

### Transversal skills

- CT1. Ability to solve technical problems arising from the management of natural spaces.
- CT2. Ability to manage and protect forest wildlife populations, with special emphasis on those of a hunting and fishing nature.
- CT3. Ability to design, direct, develop, implement and interpret projects and plans, as well as to write technical reports, recognition reports, assessments, appraisals and appraisals.
- CT4. That students have demonstrated knowledge and understanding in a field of study that is part of the basis of general secondary education, and is usually found at a level that, while supported by advanced textbooks, also

includes some aspects that involve knowledge from the forefront of your field of study.

CT5. That the 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.

CT6. 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.

CT7. That students can convey information, ideas, problems and solutions to both specialized and non-specialized audiences.

CT8. That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

CT9. 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 uses in the forestry field.

CT10. Ability to analyze the ecological structure and function of forest systems and resources, including landscapes

## Subject contents

- Diagnostic study of the natural environment.
- Climatic, edaphic and geological characterization of a station.
- Description of biotopes and plant groups.
- Identification of characteristic species. Floristic and faunal inventories.
- Experimental design for data acquisition.
- Determination of basic ecological parameters.
- Cartography and description of plant groups.
- Elaboration of a report of the study area.

### **Cabinet activities**

General presentation of the subject and objectives. Logistics.

Description of the area of study and documentary and bibliographic research. Presentation of the partial objectives and methodologies.

### **Field activities**

Each student will make 6 field trips with the corresponding teachers in each case. Own work Preparation of a report. Timing of teaching activity and methodology.

### **Learning activities**

Cabinet activities comprise 20% of the time of the subject. The remaining 80% is dedicated to field practices. The

student's own work is intended for the elaboration of the report of the course work.

## Methodology

Cabinet activities comprise 20% of the time of the subject. The remaining 80% is dedicated to field practices. The student's own work is intended for the elaboration of the report of the course work.

A first class of cabinet is dedicated to the presentation of the subject.

The others deal with various aspects of the elaboration of the work: bibliographic research, data processing, elaboration of reports ...

The hours of fieldwork are devoted to data collection and landscape observation. Description calcatas, vegetation inventories, fauna sampling and ecological data collection. The elaboration of the course work is in groups of 3-4 students, according to the final number of enrolled, and is done under the supervision and tutoring of the teachers. Despite the incidence of the COVID pandemic<sup>19</sup>, and due to the fact that students are divided into small groups, it is expected that both the first cabinet class, field trips and job direction tutorials will be done in person.

The problem that is presented to us in the face of the exits is the transport until the work area, where it will be necessary to take extreme precautions to foresee the possibility of contagions.

## Development plan

The presentation class usually corresponds to the first week of the course, with all students.

Then the students, already divided into groups, engage in field practice. These take place during the months of September-October- (November), at a rate of one per week. It should be borne in mind that in soil practice practices, only half of the students go out to the field each week.

Students must present different works according to the contents of the subject between the end of December and the end of January.

## Evaluation

<b>PART THAT IS EVALUATED</b>	<b>LEARNING OBJECTIVES</b>	<b>SCORE (1 to 10)</b>	<b>WEIGHT IN THE FINAL QUALIFICATION</b>
<b>Continuous assessment (includes coursework): Soil science</b>		<b>Minimum score required of 4 points to be able to perform the weighted average</b>	<b>50,00</b>
<b>Continuous assessment (includes coursework): Botany</b>		<b>Minimum score required of 4 points to be able to perform the weighted average</b>	<b>33,33</b>
<b>Continuous assessment (includes coursework): Fauna</b>		<b>Minimum score required of 4 points to be able to perform the weighted average</b>	<b>8,33</b>
<b>Continuous assessment (includes coursework): Ecology</b>		<b>Minimum score required of 4 points to be able to perform the weighted average</b>	<b>8,33</b>

<b>TOTAL</b>			<p><b>99,99</b> To approve a weighted score of at least 50% is necessary</p>
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## Bibliography

### Basic Bibliography

BOLÒS, O., VIGO, J.; MASALLES, R.M. & NINOT, J.M. 1990. *Flora manual dels Països Catalans*. Ed. Pòrtic.Barcelona.

PORTA, J., M. ARAN, J. BOIXADERA (ccords.). 2011. *Els Sòls de Catalunya. Conca Dellà (Pallars Jussà)*. Monografies Tècniques 1. ICGC, Barcelona.

RODRÍGUEZ-OCHOA, R. , O. ARTIEDA, J.R. OLARIETA, A. BARGUÉS. 2014. *Guia de Camp per a la Descripció de Sòls*. Universitat de Lleida, Lleida (no publicat).  
[http://www.solsforestals.udl.cat/uploads/files/Guia%20de%20camp\\_catala.pdf](http://www.solsforestals.udl.cat/uploads/files/Guia%20de%20camp_catala.pdf)

### Supplementary Bibliography

Anónimo. 2005. *Edafología*. En: Instituto Geográfico Nacional, *Atlas Geográfico Nacional, Segunda Edición, Sección II, Grupo 7*. Dirección General del Instituto Geográfico Nacional, Ministerio de Fomento, Madrid.  
<http://www.ign.es/ane/bane/>.

CONESA, J.A. (1997). *Tipologia de la vegetació: anàlisi i caracterització*. Eines, 19. Universitat de Lleida. 407 pàg.

ICGC (Institut Cartogràfic i Geològic de Catalunya). 2019. *Mapa de Sòls de Catalunya, 1:250.000*. ICGC, Barcelona. ([https://app1.icgc.cat/bd/mapes/icgc\\_MSC250M\\_v1g.pdf](https://app1.icgc.cat/bd/mapes/icgc_MSC250M_v1g.pdf))

LÓPEZ GONZÁLEZ, G. (2001). *Los árboles y arbustos de la Península Ibérica e islas Baleares*. Vol. 1-2. Mundi Prensa. 1.727 pàg. Madrid.

PORTA, J., M. LÓPEZ\_ ACEVEDO, R. RODRÍGUEZ-OCHOA. 1986. *Técnicas y Experimentos en Edafología*. Col.legi Oficial d'Enginyers Agrònoms de Catalunya, Barcelona.

PORTA, J., M. LÓPEZ-ACEVEDO, R. RODRÍGUEZ-OCHOA. 1993. *Laboratori d'Edafologia*. Universitat Politècnica de Catalunya, Barcelona.