



Universitat de Lleida

DEGREE CURRICULUM **GIS, PLANNING AND LANDSCAPE**

Coordination: VARGAS GARCIA, MIQUEL ÀNGEL

Academic year 2023-24

Subject's general information

Subject name	GIS, PLANNING AND LANDSCAPE					
Code	12436					
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION					
Typology	Degree	Course	Character	Modality		
	Master's Degree in Mountain Areas Management	1	OPTIONAL	Blended learning		
Course number of credits (ECTS)	3					
Type of activity, credits, and groups	Activity type	PRAULA	TEORIA			
	Number of credits	1.5	1.5			
	Number of groups	1	1			
Coordination	VARGAS GARCIA, MIQUEL ÀNGEL					
Department	-SENSE DEPARTAMENT-					
Teaching load distribution between lectures and independent student work	Online lessons					
Important information on data processing	Consult this link for more information.					
Language	Catalan and spanish					

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
PAUL AGUSTI, DANIEL	daniel.paul@udl.cat	0	Arrange by mail
VARGAS GARCIA, MIQUEL ÀNGEL	miquelangel.vargas@uab.cat	3	Arrange by mail

Subject's extra information

To follow this module without problems, you must be taken the 'Mountain cartography' module.

Learning objectives

- To learn the use geographic information technologies to design and plan mountain areas landscape.
- To select and use the most appropriate information and communication methodologies and tools for a project's objectives.

Competences

Generals

CG2 Handle and undertake the methods and techniques of analysis and interpretation of socio-economic and environmental statistical variables and sources.

Specific

CE4 Identify essential cartographic sources and apply Geographic Information Systems to physical and social reality

Subject contents

- GIS and environmental planning
- Data sources for spatial analysis in mountain areas
- Geoprocessing functions
- Cartographic modeling and spatial analysis

Methodology

teaching methodology	Learnig activities
Online theory	Lectura de documentació escrita/audiovisual/gràfica elaborada
	Webconferència
	Webminari

Practice / Online works	Discussion forums
	Self-monitoring activities
	Redacció d'informes i projectes
	Report and project writing
	Recerca d'informació
	Case study
Validation tests	presentation / Online validation test

Development plan

The subject will be organized in eight different sessions corresponding to the eight weeks.

Each of the sessions corresponds to a practical activity of which four must be submitted. At the end of the course, an applied project must also be submitted. It includes the geoprocessing functions worked on during the subject.

The material that will be supplied consists of a tutorial pdf document for the correct follow-up of the practices. In each document there is a theoretical presentation of the topic.

Nº week	Theory	Practices to be submitted
1	Spatial selections	-----
2	On-screen digitizing	Practice 1
3	Raster and vector basic geoprocessing functions	Practice 2
4	Cartographic modelization: raster	Practice 3
5	Cartographic modelization: vectorial	
6	Buffer	-----
7	DEM, derivatives and visibility analysis	Pràctica 4
8	Land Use and Land cover change	-----
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Evaluation

Evaluation systems

60% Practical work

30% Report, analysis reports or applied project.

10% Participation in forums, following the course or other online activities

Bibliography

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- Chuvieco, E. (2002), Teledetección ambiental. Ariel. Barcelona. 586 p
- Gutiérrez Puebla, Javier; Gould, Michael. (1994). SIG: sistemas de información geográfica. Editorial Síntesis, Madrid.

- Laurini, R. y Tompson, D. (1992) Fundamentals of Spatial Information Systems Academic Press. Londres. 680 p.
- Longley, P.A. Goodchild, M.F. Maguire, D.J. Rhind, D.W. (2001), Geographical Information Systems and Science. Wiley.
- Maguire, D.J., M.F. Goodchild y D.W. Rhind (eds.) (1991) Geographical Information Systems. Principles and Applications. 2 Vol. Longman Scienti Technical. Essex. 649+447 p.
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- O'Sullivan, David and Unwin, David (2010). Geographic Information Analysis. 2nd edition. Hoboken, New Jersey: John Wiley & Sons. 436 pp. (ISBN: 978-0-470-28857-3)
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