



Universitat de Lleida

DEGREE CURRICULUM

ENERGY MANAGEMENT

Coordination: GONZÁLEZ GUTIERREZ, JOSÉ ABEL

Academic year 2023-24

Subject's general information

Subject name	ENERGY MANAGEMENT			
Code	12425			
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	GONZÁLEZ GUTIERREZ, JOSÉ ABEL			
Department	-SENSE DEPARTAMENT-			
Important information on data processing	Consult this link for more information.			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
CALBO ANGRILL, JOSEP	josep.calbo@udg.edu	,5	Arrange by e-mail
GONZÁLEZ GUTIERREZ, JOSÉ ABEL	jose.gonzalez@udg.edu	1,5	Arrange by e-mail
MONTORO MORENO, LINO	lino.montoro@udg.edu	1	Arrange by e-mail
PAUL AGUSTI, DANIEL	daniel.paul@udl.cat	0	Arrange by e-mail

Learning objectives

Know the energy resources available in mountain areas and their possibilities and limitations of exploitation.

Evaluate the alternative energies that would currently be feasible to apply to mountain areas.

Competences

Basic

B06 Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context.

B08 That students be able to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments.

B10 That students possess the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

General

CG4 Analyze the underlying dynamics of new and complex situations, design alternative resolution strategies and take advantage of the potential for improvement.

CG6 Intervene in conflict resolution and the definition of objectives and development measures between local, private and administration agents.

Specific

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

CE7 Design alternatives for growth and development of tourism activities, energy use and other innovative sectors in mountain areas.

Subject contents

Energy sources and diversification.

Basic technical aspects of energy sources (fossil and renewable, distribution and consumption).

Energy saving and efficiency.

Effect of energy generation and use on global change.

Cases of specific areas: building and transport.

Methodology

Teaching methodology	Learning activities
Theory online	Reading of written / audiovisual / graphic documentation prepared
	Web conferencing
	Weminar
Practices/work online	Debate forums
	Self-monitoring activities
	Report and project writing
	Problem practices
	Search for information
	Case study
Validation tests	Online validation presentation / test

Development plan

Weeks 1 and 2. Fundamentals, fossil and renewable energy sources, production and demand structure.

Weeks 3, 4 and 5. Renewable resources in the mountains (solar, wind, others).

Week 6. Energy efficiency. Building. Transport.

Week 7. Environmental impact of production, mountain areas.

Week 8. Project / proposal.

During the course the necessary material will be supplied and training activities will be carried out. Exercises to be delivered will be proposed and an applicable project or proposal in mountain areas will be developed individually.

Evaluation

Evaluation	
Exercices	25%
Reports, analysis reports or applied projects	35%
Project/proposal presentation	15%

Evaluation	
Participation in forums and other online activities	15%
Virtual Campus usage logs	10%

Alternative evaluation

Students who want to ask for alternative assessment must submit an employment contract or justify, in a letter addressed to the dean, the reasons that make it impossible for him/her to carry out the continuous assessment within five (5) days after the beginning of the semester. For information, please send an e-mail to lletres.secretariacentre@udl.cat or ask for information at the Faculty's academic office (Secretaria Acadèmica de la Facultat de Lletres).

Academic fraud

If academic fraud or spontaneous copying is detected, we will apply what is established in the Regulations for the Assessment and Grading of Student Learning in UdL Bachelor's and Master's Degrees.

Bibliography

- www International Energy Agency (IEA) at <http://www.iea.org/>
- www Instituto para la Diversificación y Ahorro de Energía (IDAE) at <http://www.idae.es/>
- www Institut Català d'Energia (ICAEN) at <http://www20.gencat.cat/portal/site/icaen>
- Book Gordon, Jeffrey (cop. 2001). Solar energy : the state of the art : ISES position papers . London: James & James.
- Electronic book ICAEN (2011). Energia solar fotovoltaica at <http://icaen.gencat.cat> Col·lecció Quadern Pràctic, no 4.
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- Electronic book Da Rosa, Aldo Vieira (2009). Fundamentals of renewable energy processes (2nd ed). Boston: Academic Press/Elsevier at <http://www.sciencedirect.com/science/book/9780123746399>
- Electronic book Félix Avia (2012). La energía eólica. At <https://www.fundacionnaturgy.org>
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