



Teaching Guide

Teaching Guide				
Identifying Data				2020/21
Subject (*)	Energy Politics and Investments Analysis		Code	770523004
Study programme	Mestrado Universitario en Eficiencia e Aproveitamento Enerxético			
Descriptors				
Cycle	Period	Year	Type	Credits
Official Master's Degree	1st four-month period	First	Obligatory	6
Language	SpanishGalician			
Teaching method	Face-to-face			
Prerequisites				
Department	EconomíaEmpresaEnxeñaría Naval e Industrial			
Coordinador	Iglesias Gomez, Guillermo	E-mail	guillermo.iglesias@udc.es	
Lecturers	Iglesias Gomez, Guillermo	E-mail	guillermo.iglesias@udc.es	
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Web	moodle.udc.es/			
General description	The subject will begin giving a panoramic vision of the outline of the energy sector, making special emphasis in specific energy regulation and energy markets. In the second part, energy project evaluation will be exposed, both in terms of theoretical perspective and practical.			
Contingency plan	1. Modifications to the contents No changes 2. Methodologies *Teaching methodologies that are maintained They all hold up. With the corresponding adaptations for virtual, or semi-presential, development using telematic tools such as Moodle, Teams or e-mail. *Teaching methodologies that are modified There is no 3. Mechanisms for personalized attention to students Moodle, Teams and email. It will be attended on demand by students according to the availability of the teacher from Monday to Friday. 4. Modifications in the evaluation No changes *Evaluation observations: The corresponding adaptation will be made for its operation by means of telematic tools such as Moodle, Teams or e-mail. 5. Modifications to the bibliography or webgraphy No changes			

Study programme competences

Code	Study programme competences
A1	Análise e aplicación de metodoloxías e normativa para unha xestión eficiente da enerxía.
A2	Análisis e implantación de medidas de ahorro y eficiencia energética en los sectores industrial, terciario y residencial.
A4	Análisis de consumos energéticos y de su costes asociados.
B5	Que los estudiantes sepan comunicar sus conclusiones y los conocimientos y razones últimas que las sustentan a públicos especializados y no especializados de un modo claro y sin ambigüedades.
B7	Desarrollar las capacidades de análisis y síntesis; fomentar la discusión crítica, la defensa de argumentos y la toma de conclusiones.
B8	Incorporar el vocabulario propio para expresarse con precisión en una comunicación efectiva, tanto escrita como oral.
B15	Conocer la legislación vigente y reglamentación aplicable al sector de las energías renovables y de la eficiencia energética.
B16	Valorar la aplicación de tecnologías emergentes en el ámbito de la energía y el medio ambiente.
C2	Fomentar la sensibilidad hacia temas medioambientales.
C5	Adquirir la capacidad para elaborar un trabajo multidisciplinar
C6	Dominar la expresión y la comprensión de un idioma extranjero.



Learning outcomes			
Learning outcomes		Study programme competences	
To understand the energy sector context through the analysis of the energy policy, the relation with the environment and the role of renewable energy	AJ1	BC5	CC2
	AJ2	BC7	CC5
		BC8	
		BC15	
		BC16	
To analyze the behavior and the operation of the main energy markets: natural gas, oil and electricity.	AJ4	BC5	
		BC7	
		BC8	
		BC16	
To deepen in the financial approach applied to the analysis and assessment of energy projects within the scope of renewable energy sources.	AJ4	BC5	CC5
		BC7	CC6
		BC8	
		BC15	
		BC16	

Contents	
Topic	Sub-topic
Section 1: The general context of energy problem	Introduction: Energy Sector
	Energy policy
	Energy markets
	Energy and environment
	Renewable energy
Section 2: Project evaluation in energy sector	Introduction to basic Financial concepts: Project evaluation
	Selection of energy assets for power generation: Portfolio theory and Scenarios.
	Project evaluation of Renewable Energy Sources
	Project Finance

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student's personal work hours	Total hours
Case study	A1 A2 A4 B5 B7 B8 B15 B16 C5 C6	26	84	110
Objective test	A1 A4 B8 B15 B16	1	2	3
Guest lecture / keynote speech	B8 B15 B16 C2	16	16	32
Personalized attention		5	0	5
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies	
Methodologies	Description
Case study	It will be proposed practical cases, that can involve the use of databases, additional bibliography or ICT, in each of the topics to improve the capacity of analysis and to value the development of the competencies which were pointed out.
Objective test	It will be a test-exam about basic topics of the subject.
Guest lecture / keynote speech	This resource is employed by the teachers in theory sessions in order to explain conceptual issues.

Personalized attention



Methodologies	Description
Guest lecture / keynote speech Case study Objective test	Through individual, or group tutoring, special difficulty issues will be discussed. Also partial-registration cases or exemption of assistance will be dealt with a specific programming agreed with the coordinator.

Assessment			
Methodologies	Competencies	Description	Qualification
Case study	A1 A2 A4 B5 B7 B8 B15 B16 C5 C6	The continuous evaluation will be established through the analysis of cases presented by teaching staff to value the acquisition of the competencies.	70
Objective test	A1 A4 B8 B15 B16	Final exam about basic conceptual issues of the subject. It shall include as a minimum a test-exam. It will be developed in the official period of examinations.	30

Assessment comments
The evaluation will follow the same criteria for the first opportunity as for the second. In the situations of partial-time registration or assistance exemption, it will be established a special program and a system of delivery with the coordinator for the activities which cannot be realized in the classroom.

Sources of information	
Basic	- ECOFYS (2014). Design features of support schemes for renewable electricity. European Commission - Energía y Sociedad (2016). Manual de la Energía. - EWEA (2009). The Economics of Wind Energy. EWEA - Figueroa, E. (2006). El comportamiento económico del mercado de petróleo. Ediciones Díaz de Santos. Madrid - IRENA (2015). Renewable power generation costs in 2014. IRENA - Rendón, J. J. G.; Mesa, J. M. (2015). Precios y desempeño regulatorio en el pool eléctrico español. Documentos de Trabajo Economía y Finanzas-Centro de Investigación Económicas y Financieras, nº 15-1 - Yescombé, E.R. (2014). Principles of Project Finance. Academic Press LOCALIZACIÓN EN INTERNET DALGUNHAS REFERENCIAS: Energía y Sociedad (2016): Manual de la Energía, disponible en: http://www.energiaysociedad.es/tipo/manual-de-la-energia ECOFYS (2014): Design features of support schemes for renewable electricity, disponible en: https://ec.europa.eu/energy/sites/ener/files/documents/2014_design_features_of_support_schemes.pdf EWEA (2009): The Economics of Wind Energy, disponible en: http://www.ewea.org/fileadmin/files/library/publications/reports/Economics_of_Wind_Energy.pdf IRENA (2015): Renewable power Generation Costs in 2014, disponible en: http://www.irena.org/documentdownloads/publications/irena_re_power_costs_2014_report.pdf WEBS de instituciones: Comisión Nacional de los Mercados y la Competencia (CNMC): Energía. https://www.cnmc.es/es-es/energ%C3%ADa/sobreenerg%C3%ADa.aspx Energía y sociedad. http://www.energiaysociedad.es/European Commission Energy. http://ec.europa.eu/energy/European Union by topic: Energy. http://europa.eu/pol/ener/index_en.htm Figueroa, E. (2006). El comportamiento económico del mercado de petróleo. Ediciones Díaz de Santos. Madrid Ministerio de Industria, Energía y Turismo: Energía. http://www.minetur.gob.es/energia/es-ES/Paginas/index.aspx OMIE. http://www.omie.es/inicio
Complementary	

Recommendations
Subjects that it is recommended to have taken before
Subjects that are recommended to be taken simultaneously
Subjects that continue the syllabus



Other comments

(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.