



UNIVERSIDAD DE CASTILLA - LA MANCHA

GUÍA DOCENTE

1. General information

Course: POLICY AREAS AND OPTIMIZATION OF TRANSPORT SERVICES

Code: 310818

Type: ELECTIVE

ECTS credits: 4.5

Degree: 2343 - MASTERS DEGREE PROGRAMME IN ENGINEERING OF ROADS, CANALS AND PORTS

Academic year: 2023-24

Center: 603 - E.T.S. CIVIL ENGINEERS OF CR

Group(s): 20

Year: 2

Duration: First semester

Main language: English

Second language: Spanish

Use of additional languages:

English Friendly: N

Web site:

Bilingual: N

Lecturer: ANA MARIA RIVAS ALVAREZ - Group(s): 20				
Building/Office	Department	Phone number	Email	Office hours
Politécnico 2-A49	INGENIERÍA CIVIL Y DE LA EDIFICACIÓN	926051938	ana.rivas@uclm.es	L, M y J: 12:30 a 14:30.
Lecturer: SANTOS SANCHEZ CAMBRONERO GARCIA MORENO - Group(s): 20				
Building/Office	Department	Phone number	Email	Office hours
Politécnico /2-A47	INGENIERÍA CIVIL Y DE LA EDIFICACIÓN	926052819	santos.sanchez@uclm.es	L, M y V: 12:00 a 14:00.

2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

Not established

4. Degree competences achieved in this course

Course competences

Code	Description
CB06	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.
CB07	Apply the achieved knowledge and ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the area of study
CB10	Have the learning skills which allow to continue studying in a self-directed or autonomous way
G08	Knowledge of the design and construction problems of the different elements of an airport and of the methods of conservation and operation.
G27	Ability to communicate in a second language.
G28	Ability to work in an international context.
TE08	Knowledge of transport engineering and planning, transport functions and modes, urban transport, management of public transport services, demand, costs, logistics and financing of transport infrastructure and services.
TE10	Capacity for planning, management and operation of civil engineering related infrastructures.

5. Objectives or Learning Outcomes

Course learning outcomes

Description

Students are aware of the latest trends in the operation and selection of vehicles for transport services.

Students know the characteristics of rolling stock and how to adjust them to the needs of operation.

Students are aware of and are able to assess the advantages and disadvantages of different forms of business and of operation.

Students know the particularities of the infrastructures associated with the provision of services and particularly with high-speed rail.

Students can apply specific optimization methods to guarantee the provision of services from a commercial point of view for the company.

6. Units / Contents

Unit 1: Introduction. Policy Transport Services

Unit 2: Rail Transport Services

Unit 3: Maritime Transport Services

Unit 4: Urban Mobility Services

Unit 5: Multimodal Freight Transport

Unit 6: Air Transport Services

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD)	ECTS	Hours	As	Com	Description
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		822/2021)					
Class Attendance (theory) [ON-SITE]	Lectures	CB06 G08 G28 TE08 TE10	0.75	18.75	N	-	
Class Attendance (practical) [ON-SITE]	Case Studies	CB06 CB07 CB10 G08 G27 G28 TE08 TE10	0.6	15	Y	Y	
Writing of reports or projects [OFF-SITE]	Case Studies	CB06 CB07 CB10 G08 G27 G28 TE08 TE10	3.15	78.75	Y	Y	
Total:			4.5	112.5			
Total credits of in-class work: 1.35			Total class time hours: 33.75				
Total credits of out of class work: 3.15			Total hours of out of class work: 78.75				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System			
Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Final test	0.00%	50.00%	Solving two problems of similar characteristics to those seen in the course. Minimum mark 4.
Assessment of active participation	10.00%	0.00%	Participation in class presentations will be considered.
Assessment of problem solving and/or case studies	70.00%	0.00%	Solving the case presented in the different topics. The minimum mark for each proposed problem is 4. This test can be made up by solving additional problems that must be handed in before the date set for the final exam.
Oral presentations assessment	20.00%	0.00%	Presentation of the topics proposed for analysis and dissertation throughout the course. Minimum mark for each presentation 4. These tests will not be recoverable.
Final test	0.00%	50.00%	Written exam on the content of the theoretical part of the course (short-question test and long subject). Minimum mark 4.
Total:	100.00%	100.00%	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

Evaluation criteria for the final exam:

Continuous assessment:

The course is passed with a 5 after the application of the criteria defined in the continuous assessment system, previously indicated in this guide. No marks are kept for other academic years.

Non-continuous evaluation:

It will consist of the two tests detailed in the evaluation system, each with a weight of 50% and a minimum mark of 4. The course is passed with a minimum overall mark of 5.

Specifications for the resit/retake exam:

The same as in the final exam.

Students who have not passed the course in the final exam will have to make up the failed topics in the retake exam by solving additional problems proposed for this exam. These cases must be handed in on the day set for this exam in the student's guide.

In the extraordinary exam, each student will be subject to the same evaluation system (continuous or non-continuous) as in the ordinary exam.

Specifications for the second resit / retake exam:

The same as for the non-continuous evaluation.

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours
Unit 1 (de 6): Introduction. Policy Transport Services	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	1.5
Class Attendance (practical) [PRESENCIAL][Case Studies]	1.5
Writing of reports or projects [AUTÓNOMA][Case Studies]	8
Unit 2 (de 6): Rail Transport Services	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3
Class Attendance (practical) [PRESENCIAL][Case Studies]	1.5
Writing of reports or projects [AUTÓNOMA][Case Studies]	10
Unit 3 (de 6): Maritime Transport Services	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Class Attendance (practical) [PRESENCIAL][Case Studies]	4
Writing of reports or projects [AUTÓNOMA][Case Studies]	15.75
Unit 4 (de 6): Urban Mobility Services	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Class Attendance (practical) [PRESENCIAL][Case Studies]	5

Writing of reports or projects [AUTÓNOMA][Case Studies]	20
Unit 5 (de 6): Multimodal Freight Transport	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	4
Class Attendance (practical) [PRESENCIAL][Case Studies]	1.5
Writing of reports or projects [AUTÓNOMA][Case Studies]	15
Unit 6 (de 6): Air Transport Services	
Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	2.25
Class Attendance (practical) [PRESENCIAL][Case Studies]	1.5
Writing of reports or projects [AUTÓNOMA][Case Studies]	10
Global activity	
Activities	hours
Class Attendance (practical) [PRESENCIAL][Case Studies]	15
Writing of reports or projects [AUTÓNOMA][Case Studies]	78.75
Class Attendance (theory) [PRESENCIAL][Lectures]	18.75
Total horas: 112.5	

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Colomer Ferrándiz, José V.	Centros integrados de mercancías: una visión global	Fundación Instituto Valenciano de Estudios de Tran		84-921119-0-9	1995	
Horonjeff, Robert	Planning and design of airports	McGraw-Hill		0-07-045345-4	1993	
Ortúzar, Juan de Diós	Modelling transport	John Wiley & Sons		978-0-471-86110-2	2001	
Romero, Carlos	Teoría de la decisión multicriterio: conceptos, técnicas y a	Alianza		84-206-8144-X	1993	
	Formulación y resolución de modelos de programación matemática	Universidad de Castilla-La Mancha. Escuela Técnica		84-600-9751-X	2002	