

SUBJECT TEACHING GUIDE

G1985 - Roads

Degree in Civil Engineering First Degree in Civil Engineering

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Degree in Civil Engineering First Degree in Civil Engineering			Type and Year	Compulsory. Year 4 Compulsory. Year 4
Faculty	School of civil Engineering				
Discipline	INFRASTRUCTURES OF TRANSPORT				
Course unit title and code	G1985 - Roads				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS				
Name of lecturer	ANGEL VEGA ZAMANILLO				
E-mail	angel.vega@unican.es				
Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 0. DESPACHO (0073)				
Other lecturers	MIGUEL ANGEL CALZADA PEREZ				

3.1 LEARNING OUTCOMES

- Know how to apply the legislation and regulations regarding roads.
- Have basic knowledge to design, inspect and build road works.
- Basic knowledge to plan and order traffic.

4. OBJECTIVES

The objective of the subject is to ensure that the student can apply the knowledge acquired in the design, design and construction of road structures, in a work context.

Additionally, students will be able to design the layout of a conventional road, and the design of the entire infrastructure of a linear work.

In addition, the student will be able to manage a work of a conventional road, with its corresponding work units

6. SUBJECT PROGRAM

CONTENTS

1	<p>-INTRODUCTION TO TRAFFIC ENGINEERING: □-Vehicles □-Road networks □- Characteristics and basic variables in continuous circulation □• Capacity and level of service in continuous circulation □</p> <p>-ROAD LAYOUT: □-Regulations: scope of application and design parameters. □- Visibility. □-Plan layout. □-Elevation layout. □-Cross section. □- Coordination of the plan and elevation. □-Knots: elements and typology</p>
2	<p>-SOILS AND ESPLANADES-Road infrastructure. -Classification of soils for roads. -Soil compaction on roads. -Bearing capacity of soils on roads. -Embankments and clearings: Regulations and quality control. -ROAD DRAINAGE: -Surface drainage on roads: road instruction-Underground drainage -INTRODUCTION OF PAVEMENTS OF ROADS</p>

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Theoretical proof	Written exam	No	Yes	50,00
Exercise proof	Written exam	Yes	Yes	40,00
Lab practice	Work	No	No	10,00
TOTAL				100,00
Observations				
<p>- In order to calculate the weighted average, it is necessary to have obtained a minimum grade of 3.5 in each of the recoverable activities.</p> <p>- In the call for the extraordinary exam, the student must present himself to the recoverable activities in which a grade equal to or greater than 5.0 previously has not been achieved.</p> <p>- In the event that an early call is granted, the evaluation of the subject will be complete. It will consist of a theory part, with a weight of 60% of the final grade; and another of exercises with a weight of 40% total. To be able to perform the average it will be necessary to obtain at least a 3.5 in each of the parts. No part of the subject will be released for future exams.</p> <p>Note: According to Royal Decree RD 1125/2003 the grades: 0.0-4.9: Suspense (SS), 5.0-6.9: Approved (AP), 7.0-8.9: Notable (NT), 9.0-10: Outstanding (SB).</p>				
Observations for part-time students				
<p>Part-time students will be able to choose between the assessment method for a full-time student, or a single global exam of the entire subject (theory and exercises) with a weight of 90%.</p> <p>In the event that these students have delivered the internship work, it will be considered in the grade with a percentage of 10% of the</p> <p>totalThe conditions to pass the subject are the same as those included in the previous section of observations</p>				

8. BIBLIOGRAPHY AND TEACHING MATERIALS
BASIC
<p>Apuntes y anotaciones de la asignatura</p> <p>Normativa vigente de carreteras</p>