

## SUBJECT TEACHING GUIDE

G1985 - Roads

Degree in Civil Engineering

Academic year 2022-2023

1. IDENTIFYING DATA					
Degree	Degree in Civil Engineering			Type and Year	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				
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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. COURSE ORGANIZATION

##### CONTENTS

1	<p>-INTRODUCTION TO TRAFFIC ENGINEERING: □-Vehicles □-Road networks □-Characteristics and basic variables in continuous circulation □-Capacity and service level in continuous circulation □</p> <p>-ROAD LAYOUT: □-Regulations: scope of application and design parameters. □-Visibility. □-Layout in plan. □-Elevation layout. □-Cross section. □-Coordination plant – elevation. □-Knots: elements and typology.</p>
2	<p>-SOILS AND ESPLANADES-Road infrastructure.</p> <p>-Classification of soils for roads.</p> <p>-Soil compaction on roads.</p> <p>-Bearing capacity of soils on roads.</p> <p>-Embankments and clearings: Regulations and quality control.</p> <p>-ROAD DRAINAGE:</p> <p>-Surface drainage on roads: road instruction-Underground drainage</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
<b>TOTAL</b>				<b>100,00</b>
<b>Observations</b>				
<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>				
<b>Observations for part-time students</b>				
<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

Apuntes y anotaciones de la asignatura  
Normativa vigente de carreteras