

## SUBJECT TEACHING GUIDE

### G832 - Multimedia Electronic Systems

#### Degree in Telecommunication Technologies Engineering

Academic year 2019-2020

1. IDENTIFYING DATA					
Degree	Degree in Telecommunication Technologies Engineering			Type and Year	Optional. Year 4
Faculty	School of Industrial Engineering and Telecommunications				
Discipline	Subject Area: Applied Electronics				
Course unit title and code	G832 - Multimedia Electronic Systems				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web	<a href="http://moodle.unican.es/course/view.php?id=1171">http://moodle.unican.es/course/view.php?id=1171</a>				
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. TECNOLOGIA ELECTRONICA E INGENIERIA DE SISTEMAS Y AUTOMATICA				
Name of lecturer	PABLO PEDRO SANCHEZ ESPESO				
E-mail	pablo.sanchez@unican.es				
Office	E.T.S. de Ingenieros Industriales y de Telecomunicación. Planta: - 3. DESPACHO PROFESOR (S3002)				
Other lecturers	IÑIGO UGARTE OLANO JESUS MIGUEL PEREZ LLANO				

### 3.1 LEARNING OUTCOMES

- Participants acquire the ability to understand the operation of the audio and video capture systems.
- Participants acquire basic knowledge about the development of audio/video compression systems
- To learn implementation techniques of multimedia systems

#### 4. OBJECTIVES

- To study audio/image capture and reproduction systems
- To know basic techniques for multimedia information management
- To understand the functional behavior of electronics systems that process audio and image signals

#### 6. COURSE ORGANIZATION

##### CONTENTS

1	Hardware platforms for multimedia systems
2	Sound
3	image
4	Multimedia systems
5	Implementation and management of multimedia systems

#### 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Continuous evaluation	Others	No	Yes	20,00
Final exam	Written exam	Yes	Yes	50,00
Laboratory exercises	Work	No	No	30,00
TOTAL				100,00
Observations				
If a student cannot participate in a continuous evaluation exercise or the exercise grade is less than the final exam grade the continuous evaluation exercise will not be taken into account and its grade percentage will be added to the final exam percentage.				
Observations for part-time students				

#### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

##### BASIC

- Z-N Li, M Drew, J Liu, "Fundamentals of Multimedia". Springer. 2nd Edition. 2014.
- R. Steinmetz, K. Nahrstedt, "Multimedia Fundamentals", Volumen 1. Prentice Hall. 2002.
- Computer vision: Principles and Practice. P. Azad et all. Elektor.