

SUBJECT TEACHING GUIDE

G174 - Photo Interpretation and Remote Sensing

Degree in Geography and Land Planning

Academic year 2023-2024

1. IDENTIFYING DATA					
Degree	Degree in Geography and Land Planning			Type and Year	Compulsory. Year 2
Faculty	Faculty of Humanities				
Discipline	Technical Fundamentals in Geography and Land Use Planning Technical Subjects in Geography				
Course unit title and code	G174 - Photo Interpretation and Remote Sensing				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web	https://aulavirtual.unican.es/				
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. GEOGRAFIA, URBANISMO Y ORDENACION DEL TERRITORIO				
Name of lecturer	DOMINGO FERNANDO RASILLA ALVAREZ				
E-mail	domingo.rasilla@unican.es				
Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 1. DESPACHO (1014E)				
Other lecturers	FRANCISCO CONDE ORIA				

3.1 LEARNING OUTCOMES

- Upon completion of the course, the student will be able to:
 - Understand the physical principles underlying both Aerial Photography and Remote Sensing .
 - Know the main applications in Geography of Aerial Photography and Remote Sensing .
 - Understand the processes that are transforming the territory and its evolution over time.

4. OBJECTIVES

The primary objective of the course is the acquisition of basic knowledge about the physical and conceptual foundations of Aerial Photography and Remote Sensing and their practical applications in relation to the spatial organization of the territory and the resolution of environmental problems.

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As an additional objective, students will know the dynamics of the territory from the contrast of images from different periods or moments in time.

6. COURSE ORGANIZATION

CONTENTS

1	1. INTRODUCTION
2	TOPIC 1: AERIAL PHOTOGRAPHY
3	TOPIC 2: REMOTE SENSING.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Continuous Assessment	Others	Yes	Yes	45,00
Final Dissertation	Work	Yes	No	20,00
Evaluation of theoretical and practical knowledge.	Laboratory evaluation	Yes	Yes	35,00
TOTAL				100,00

Observations

Attendance is compulsory due to the practical nature of the module. A serie of laboratory exercises will be provided in the sessions, as such as the stereoscopes, specific analysis and image processing software. Only in the case of having a physical disability to perform some of the practical activities described, the evaluation of those parts will take place through the estimation of a similar work, adapted to their conditions if possible, and with the same weight in the final note than the one applied in general. Marks in hand-in practical will be considered as minimum resit mark for the extraordinary call.

Observations for part-time students

If part-time students miss a practical session for certificated reasons, the marking criteria for those activities will be held by an estimated alike work adapted to their conditions, and with the same weight in the final mark than the one applied in general.

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

FERNÁNDEZ GARCÍA, F. (2000) Introducción a la fotointerpretación. Barcelona: Ediciones Ariel. 253p.

CAMPBELL, J.B., WYNNE, R.H. (2011) Introduction to the Remote Sensing. New York: Guilford Press, 5th ed, 667 p.

CHUVIECO, E. (2000): Fundamentos de Teledetección espacial, Madrid, Rialp.

KAMUSOKO, C (2019): Remote Sensing Image Classification in R. Springer Geography, Singapore, 189 pp.

GARCÍA RODRÍGUEZ, M. P., SANZ DONAIRE, J. J., PÉREZ GONZÁLEZ, M. E. y NAVARRO MADRID, A. (2013): Guía Práctica de Teledetección y Fotointerpretación, Madrid, Universidad Complutense de Madrid, PIMCD 82/2011-12.

RANI, A; KUMAR, N; SINGH SK. y SINHA NK (2021): Remote Sensing Data Analysis in R. ? CRC Press, 364 pp.

