

COURSE DESCRIPTION

1. GENERAL

SCHOOL	ENVIRONMENT, GEOGRAPHY AND APPLIED ECONOMICS		
DEPARTMENT	GEOGRAPHY		
LEVEL OF COURSE	Undergraduate		
COURSE CODE		ΕΞΑΜΗΝΟ ΣΠΟΥΔΩΝ	7 th
COURSE TITLE	GEOINFORMATION IN ENVIRONMENTAL MANAGEMENT		
STRUCTURE OF TEACHING ACTIVITIES	TEACHING HOURS PER WEEK	NUMBER OF CREDITS ALLOCATED (ECTS)	
Lectures and laboratory Exercises	3	5	
TYPE OF COURSE	Optional		
PREREQUISITES	-		
LANGUAGE OF INSTRUCTION	GREEK		
COURSE OFFERED TO ERASMUS STUDENTS (URL)	YES, IN ENGLISH (IF REQUIRED)		

2. EXPECTED LEARNING OUTCOMES

Learning Outcomes
The course aims to offer a deeper knowledge and technical skills to the students on the use of a wide spectrum of geoinformation technologies and of their practical applications in managing the physical and manmade environment.

3. COURSE CONTENTS

<p>Some of the key topics covered in the course include:</p> <ul style="list-style-type: none"> • Geoinformation in managing the natural and agricultural environment • Geoinformation in managing the urban and manmade environment • Geoinformation in managing the ocean and coastal environment • Geoinformation in biotic and abiotic hazards management • Geoinformation use in planetary science • Geoinformation-based operational products in environmental management

4. TEACHING AND ASSESSMENT METHODS

TYPE OF LECTURES	<ul style="list-style-type: none"> - In class lectures - Practical training in ICT laboratory 	
ICT USE	ICT use, Internet use and e-class Use of specialized software (open source & commercial) in geospatial data handling	
TEACHING STRUCTURE	Activity	Hours per semester
	Lectures	13
	Laboratory practice	26
	Assignment	30
	Individual study	58
	TOTAL	127
ASSESSMENT METHODS	Assessment Language: Greek Assessment: <ul style="list-style-type: none"> • Written final exam: (70%) • Submission of group assignment and presentation: (30%) Assessment criteria are announced at the start of the semester.	

5. RECOMMENDED READING

ΑΡΧΕΣ ΚΑΙ ΕΦΑΡΜΟΓΕΣ ΔΟΡΥΦΟΡΙΚΗΣ ΤΗΛΕΠΙΣΚΟΠΗΣΗΣ, Κ. ΚΑΡΤΑΛΗΣ & Χ. ΦΕΙΔΑΣ, ΕΚΔΟΣΕΙΣ ΤΖΙΟΛΑ, 2012
 ΕΠΙΣΤΗΜΗ ΓΕΩΓΡΑΦΙΚΗΣ ΠΛΗΡΟΦΟΡΙΑΣ-ΟΛΟΚΛΗΡΩΜΕΝΗ ΠΡΟΣΕΓΓΙΣΗ ΚΑΙ ΕΙΔΙΚΑ ΘΕΜΑΤΑ, ΜΑΡΙΝΟΣ ΚΑΒΟΥΡΑΣ, ΚΑΛΛΙΠΟΣ, 2016

Further Reading:

Pandey, P.C., P.K. Srivastava, B. Bhattacgarya & G.P. Petropoulos (2020): Hyperspectral Remote Sensing: Theory & Applications. Elsevier, ISBN: 978-0-08-102894-0.
 Petropoulos, G.P. & T. Islam (2017): Remote Sensing of Hydrometeorological Hazards, ISBN: 978-1-4987-7758-2, Taylor& Francis, ISBN: 978-01-4987-7758-2.
 Petropoulos G.P. (2013): Remote Sensing of Energy Fluxes and Soil Moisture Content, 506 pp, Taylor and Francis. ISBN: 978-1-4665-0578-0