# **COURSE DISCRIPTION**

1. GENERAL

SCHOOL					
SCHOOL		ENVIRONMENT, GEOGRAPHY AND APPLIED			
	ECONOMICS				
DEPARTMENT	GEOGRAPHY				
LEVEL OF COURSE	Undergraduate				
COURSE CODE	ΓΦ0521 <b>SEMESTER</b> 7 <sup>TH</sup>			7 <sup>™</sup>	
COURSE TITLE	SPATIAL ANALYSIS APPLICATIONS IN REAL ESTATE				
	MANAGEMENT				
STRUCTURE OF TEACHING ACTIVITIES		TEACHING HOURS PEF WEEK	CREDITS		
Lectures and Laboratory Classes		3	5		
TYPE OF COURSE	Optional				
PREREQUISITES	-				
LANGUAGE OF INSTRUCTION	GREEK				
COURSE OFFERED TO ERASMUS	YES (in English if required)				
STUDENTS					
(URL)					

### 2. EXPECTED LEARNING OUTCOMES

#### Learning outcomes

Describe the objectives of the course as well as the expected learning outcomes

The main objective of this module is to introduce students to the use of new technologies and geoinformatics (such as Geographic Information Systems and geospatial data on the web) in property management in the private sector (such as Property Management Companies) and public sector (such as National Cadastre & Mapping Agency S.A.). An additional aim is the introduction to property valuation based on the European Valuation Standards as they are used in the real estate market in Greece. Moreover, a thorough presentation of the Geographically Weighted Regression (GWR) method to estimate property values based Hedonic Price Modelling theory takes place. It is a requirement for this module that students have a good knowledge of statistics, spatial analysis and GIS. By the end of this module the student should:

- understand how new technologies and geoinformatics can help in better property management
- know what it is and what the National Cadastre & Mapping Agency S.A. does
- know what are the values of a property in the Greek real estate market
- know which property evaluation methods are used in the Greek real estate market
  be able to collect the appropriate data and apply methods of spatial analysis to
- estimate property values based on hedonic price modelling theory.
- has knowledge about contemporary spatial analysis methods, such as the

Geographically Weighted Regression, and be able to apply them to real estate data and to draw conclusions from the results of the analysis

# 3. COURSE CONTENTS

- Introduction to Property Management
- Geoinformatics and Real Estate
- Geographic Information Systems in Property Management
- Introduction to property valuation
- Property Valuation Standards and Methods
- Hedonic Price Models for Property Valuation
- Geographically Weighted Regression (GWR)
- The Greek real estate market and Property Management Companies
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4. TEACHING AND ASSESSIVIENT IVIETHODS	4.	TEACHING AND ASSESSMENT METHODS
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TYPE OF LECTURES	In class lectures			
	Laboratory Lectures and Practice			
ICT USE	Internet use and e-class, use of software (R, Rstudio,			
	QGIS, ArcGIS)			
TEACHING STRUCTURE	Activity	Hours per semester		
	Lectures	30		
	Laboratory	9		
	Project	30		
	Studying	60		
	TOTAL	129		
ASSESSMENT METHODS	Assessment Language: Greek			
	Assessment Methods Essay at a form of a scientific paper (100%)			

## 5. RECOMMENDED READING

Suggested Reading:

Scientific Journals: