COURSE OUTLINE

GEOGRAPHIC INFORMATION SYSTEMS IN CULTURE

1. GENERAL

SCHOOL	CLASSICS AND HUMANITIES
DEPARTMENT/UPS	HUMANITIES / DIGITAL APPLICATIONS IN ARTS AND CULTURE
LEVEL OF STUDIES	UNDERGRADUATE – LEVEL 6

COURSE CODE	XXXXX	**SEMESTER**	5TH

COURSE TITLE	GEOGRAPHIC INFORMATION SYSTEMS IN CULTURE

TEACHING ACTIVITIES *If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.*	**TEACHING HOURS PER WEEK**	**ECTS CREDITS**
	3	5
Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.		

COURSE TYPE *Background, General Knowledge, Scientific Area, Skill Development*	SCIENTIFIC AREA
PREREQUISITES:	NO
TEACHING & EXAMINATION LANGUAGE:	GREEK
COURSE OFFERED TO ERASMUS STUDENTS:	YES
COURSE URL:	https://eclass.duth.gr/courses/XXXXXX/

2. LEARNING OUTCOMES

Learning Outcomes

Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.

Upon successful completion of the course, participants will be able to:

- Understand the fundamental concepts of Geographic Information Systems (GIS) and their usefulness in the preservation and management of cultural heritage.
- Apply GIS tools and techniques for the analysis and visualisation of spatial data related to cultural heritage sites, objects, and landscapes.
- Collect, digitise, and manage spatial data.
- Conduct spatial analysis and mapping for the interpretation of historical and archaeological landscapes.
- Create three-dimensional models of cultural and archaeological sites using GIS for the documentation, preservation, and presentation of cultural heritage monuments.
- Successfully integrate GIS into projects for the preservation and protection of cultural heritage.
- Evaluate the effectiveness of GIS integration in cultural heritage projects.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, ICT Use	*Project design and management*
Adaptation to new situations	*Equity and Inclusion*
Decision making	*Respect for the natural environment*
Autonomous work	*Sustainability*
Teamwork	*Demonstration of social, professional and moral responsibility and sensitivity to gender issues*
Working in an international environment	*Critical thinking*
Working in an interdisciplinary environment	*Promoting free, creative and inductive reasoning*
Production of new research ideas	

- Search, analysis and synthesis of data and information, ICT Use
- Autonomous work
- Teamwork

- Promoting free, creative and inductive reasoning
- Production of new research ideas
- Working in an interdisciplinary environment

3. COURSE CONTENT

1. Introduction to Geographic Information Systems (GIS) in Culture
2. Key definitions, concepts, and tools of Topography
3. Fundamental concepts of GIS
4. Collection of spatial data: methods and tools
5. Digital mapping of cultural heritage
6. Spatial analysis using GIS tools
7. Management of geospatial data and metadata in culture
8. Digital terrain models and three-dimensional modelling in cultural spaces
9. Remote sensing and aerial photography in cultural heritage
10. Visualisation and dissemination of spatial data related to cultural heritage
11. Planning for the protection of cultural heritage using GIS
12. Analysis and mapping of archaeological sites with GIS
13. Application of GIS in museum exhibitions

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD *Face to face, Distance learning, etc.*	• Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) *Use of ICT in Teaching, in Laboratory Education, in Communication with students*	• Digital assessment tools • Online collaboration tools • Use of ICT in teaching and communication with students • PPT presentations • Teaching material, announcements and communication through the eClass platform • Communication with students via email

TEACHING ORGANIZATION *The ways and methods of teaching are described in detail.* *Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.* *The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.*

Activity	*Workload/semester*
Lectures	26
Laboratory Exercise	13
Essay	30
Projects	38
Study and analysis of bibliography	40
Written examination	3
Total	150

STUDENT EVALUATION *Description of the evaluation process* *Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others* *Please indicate all relevant information about the course assessment and how students are informed*	Formative Essay (compulsory): 50% Final written examination: 50%

5. SUGGESTED BIBLIOGRAPHY

- Bolstad, P. (2016). GIS Fundamentals: A First Text on Geographic Information Systems, Fifth

Edition. XanEdu Publishing.

- Smith, M. J., Goodchild, M. F., & Longley, P. A. (2018) Geospatial Analysis: A comprehensive guide to principles, techniques and software tools, 6th edition, The Winchelsea Press, Edinburgh
- Κάβουρας, Μ., Δάρρα, Α., Κονταξάκη, Σ., &Τομαή, Ε. (2016). Επιστήμη Γεωγραφικής Πληροφορίας - Αρχές και Τεχνολογίες [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. https://dx.doi.org/10.57713/kallipos-696
- Στεφανάκης, Ε., (2010). Βάσεις γεωγραφικών δεδομένων και συστήματα γεωγραφικών πληροφοριών. Εκδόσεις Παπασωτηρίου.
- Χατζόπουλος, Ι., & Χατζοπούλου, Ν. (2020). Γεωχωροπληροφορική τοπογραφία. Εκδόσεις Τζιόλα.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXXXXXX
Contact details:	XXXXXXXX
Supervisors: (1)	YES
Evaluation methods: (2)	Essay (compulsory): 50% Final written examination: 50%
Implementation Instructions: (3)	The written exams will be conducted via the eClass platform on a date and time that will be announced in advance. Students will be informed of the exam duration and content well ahead of the scheduled exam. The assignment must be submitted through eClass by a specified deadline.

(1) Please write YES or NO

(2) Note down the evaluation methods used by the teacher, e.g.
- ➢ *written assignment* or/and exercises
- ➢ written or oral examination with distance learning methods, provided that the integrity and reliability of the examination are ensured.

(3) In the **Implementation Instructions** section, the teacher notes down clear instructions to the students:

a) in case of **written assignment and / or exercises:** the deadline (e.g. the last week of the semester), the means of submission, the grading system, the grade percentage of the assignment in the final grade and any other necessary information.

b) in case of **oral examination with distance learning methods:** the instructions for conducting the examination (e.g. in groups of X people), the way of administration of the questions to be answered, the distance learning platforms to be used, the technical means for the implementation of the examination (microphone, camera, word processor, internet connection, communication platform), the hyperlinks for the examination, the duration of the exam, the grading system, the percentage of the oral exam in the final grade, the ways in which the inviolability and reliability of the exam are ensured and any other necessary information.

 c) in case of **written examination with distance learning methods**: the way of administration of the questions to be answered, the way of submitting the answers, the duration of the exam, the grading system, the percentage of the written exam of the exam in the final grade, the ways in which the integrity and reliability of the exam are ensured and any other necessary information.

There should be an attached list with the Student Registration Numbers only of students eligible to participate in the examination.