



DEMOCRITUS UNIVERSITY OF THRACE
USP «DIGITAL APPLICATIONS IN ARTS AND CULTURE»
OF THE DEPARTMENT OF HUMANITIES

COMPULSORY COURSES
OUTLINES

KOMOTINI 2024

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1ST SEMESTER

COURSE OUTLINE

LITERATURE AND 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	1 ST
COURSE TITLE	LITERATURE AND CULTURE		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>
<p>After the successful completion of the course, participants are expected to be able to:</p> <ul style="list-style-type: none"> • Study and understand the evolution of views on the concept of literature <ul style="list-style-type: none"> – from the literature of ancient Greek culture, – to literature as imitation, – as expression, – as language-sign, and – as social practice – as digital literature/hyperliterature/cyberliterature. • Comprehend the significance of literature as a cultural phenomenon and medium of expression. • Study and define the relationship between literature and culture from a historical-evolutionary perspective. • Appreciate the position of literature within the framework of cultural studies. • Realize the influences that society and history exert on literary production. • Examine how literary creations reflect and represent the cultural, social, and historical context of their time of production. • Develop skills for analyzing and interpreting literary texts. • Enhance their critical thinking and ability to formulate well-founded opinions on literary works.

- Familiarize themselves with the basic principles of Cultural/Literary Iconology.
- Understand the representation of space in literary narration and the interpretative approach to space from the field of Literary Geography.
- Follow the transformation of a literary work into visual narration.
- Identify, evaluate, and utilize intertextual connections between texts of Greek and European literature, with a focus on works from Balkan countries and Black Sea countries literatures.
- Study issues related to the translation of literary texts: – Problems in translating a literary text: loss or preservation of cultural elements? Findings, scientific positions/proposals.
 – The translation of literary works as a means of intercultural dialogue.
- Evaluate the information and knowledge they acquire and choose the topic for their assignment.
- Utilize sources critically, relate them, and compare them.
- Collaborate on group projects.
- Compile an assignment on a chosen topic.
- Evaluate their work with reasoned arguments.

General Skills	
<i>Name the desirable general skills upon successful completion of the module</i>	
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>
<i>ICT Use</i>	<i>Equity and Inclusion</i>
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>
<i>Decision making</i>	<i>Sustainability</i>
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>
<i>Teamwork</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	

- Search, analysis and synthesis of data and information
- Decision making
- Autonomous work
- Teamwork
- Working in an interdisciplinary environment
- Respect for diversity and multiculturalism
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Promotion of free, creative, and inductive reasoning

3. COURSE CONTENT

1	Introduction and organization of the course.
2	Assignment of topics for assignments. Seminar on scientific technical writing.
3	Literature: conceptual delimitations/evolution of views on the concept of literature: exemplary considerations.
4	Literature and culture: theoretical and methodological connections.
5	Literature and Cultural Studies.
6	Alterity in literature. Cultural/Literary Iconology.
7	The representation of space/place in literary narrative. Literary Geography. Digital literary maps.
8	The semiotic translation of literary texts according to Umberto Eco. Transformation/adaptation of literary works into visual narratives (film, television series, graphic novels, digital storytelling).
9	Literature and other arts: connections and intertextual relations.
10	Contemporary trends and challenges: digital age and digital literature/hyperliterature/cyberliterature: conceptual delimitations, studies of works.

11	Study of films as literary hypertexts.
12	The translation of literary works as a means of intercultural dialogue. Study of translated works from Greek literature with an emphasis on translations into Balkan countries and Black Sea countries languages.
13	Evaluative assessment of the course.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Face-to-face lectures. • Seminars, study and analysis of literature with reference to the course units. • Differentiated instruction. • Inquiry-based teaching. • Collaborative teaching. 														
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<ul style="list-style-type: none"> • Use of ICT in Teaching and Communication with students: • PowerPoint presentations • Videos • Utilization of multimodal-multimedia material in teaching • Communication and coordination of study and assignment preparation through e-class and social media platforms 														
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th><i>Activity</i></th> <th><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Interactive Teaching</td> <td>30</td> </tr> <tr> <td>Study and Analysis of Bibliography</td> <td>47</td> </tr> <tr> <td>Writing Assignments (Individual or Group)</td> <td>61</td> </tr> <tr> <td>Examinations</td> <td>3</td> </tr> <tr> <td>Total</td> <td>180</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	39	Interactive Teaching	30	Study and Analysis of Bibliography	47	Writing Assignments (Individual or Group)	61	Examinations	3	Total	180
<i>Activity</i>	<i>Workload/semester</i>														
Lectures	39														
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Total	180														
<p>STUDENT EVALUATION <i>Description of the evaluation process</i> <i>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</i></p>	<p>Formative Assessment</p> <p>Intermediate assessments through applications at an individual or group level (formative assessments): 20% Assignment: 30% Final written examination: 50%</p>														

Please indicate all relevant information about the course assessment and how students are informed

5. SUGGESTED BIBLIOGRAPHY

1. Barker, Ch. & Jane, E. (2020). *Πολιτισμικές Σπουδές. Θεωρία και Πρακτική*. Αθήνα: Τζιόλα.
2. Δημάση, Μ. (2017). *Ίστορία ενός αιχμαλώτου του Στρατή Δούκα: αφηγηματική υπερδομή και διαπολιτισμικές προσεγγίσεις με την αξιοποίηση λέξεων από την τουρκική γλώσσα*. Θεσσαλονίκη: εκδ. Αφοί Κυριακίδη ΕΚΔΟΣΕΙΣ Α.Ε.
3. Δημητρούλια, Ξ., & Κεντρωτής, Γ. (2015). *Λογοτεχνική μετάφραση-θεωρία και πράξη* [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. [<https://dx.doi.org/10.57713/kallipos-511>]
4. Eco, U. (2003). *Εμπειρίες μετάφρασης. Λέγοντας σχεδόν το ίδιο*. Μτφρ. Έ. Καλλιφατίδη. Αθήνα: Ελληνικά Γράμματα.
5. Κούγκουλος, Θ. Β. (2020). *Η αναπαράσταση του γενέθλιου τόπου στα διηγήματα του Γ. Μ. Βιζυηνού*. Serie de Estudios Neogriegos 1. Granada: Centro de Estudios Bizantinos, Neogriegos y Chipriotas.
6. Fokkema, D. & Ibsch, E. (2011). *Θεωρίες Λογοτεχνίας του Εικοστού Αιώνα. Δομισμός. Μαρξισμός. Αισθητική της πρόσληψης. Σημειωτική* (μτφρ. Γιάννης Παρίσης). Αθήνα: Πατάκης.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	M. DIMASI
Contact details:	mdimasi@bscc.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Assignment: 40% Written exam: 60%
Implementation Instructions: (3)	The submission of assignments and the written exam will take place via eClass on a predetermined date.

- (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.

COURSE OUTLINE

GREEK HISTORY AND ITS SOURCES FROM ANTIQUITY TO THE PRESENT

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	1 ST
COURSE TITLE	GREEK HISTORY AND ITS SOURCES FROM ANTIQUITY TO THE PRESENT		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>										
<p>Upon successful completion of the course, students will be able to:</p> <ul style="list-style-type: none"> • Understand the main trends and general characteristics of Greek history and apply methodological tools to assess the figures and events that shaped Greece, from the Mycenaean period and the rise of ancient city-states to the Byzantine Empire, its dissolution, the arrival of Latin and Ottoman rulers, the establishment of the Greek nation-state, Greece's entry into the EEC, and the era of the pandemic. • Place the key milestones of Greek history within the European context and broader historical settings. • Interpret primary sources of Greek history. • Appreciate the value of historical sources and understand the differences in documentary material available to historians and those working in the preservation and utilization of these sources with digital tools. 										
<p>General Skills <i>Name the desirable general skills upon successful completion of the module</i></p> <table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td></td> <td><i>Demonstration of social, professional and moral</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>		<i>Demonstration of social, professional and moral</i>
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>									
<i>ICT Use</i>	<i>Equity and Inclusion</i>									
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>									
<i>Decision making</i>	<i>Sustainability</i>									
	<i>Demonstration of social, professional and moral</i>									

<i>Autonomous work</i>	<i>responsibility and sensitivity to gender issues</i>
<i>Teamwork</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, ICT Use • Autonomous work • Teamwork • Equity and Inclusion • Promoting free, creative and inductive reasoning 	

3. COURSE CONTENT

<ol style="list-style-type: none"> 1. Mycenaean World and Homeric Era 2. From City-States to Alexander the Great 3. Roman Rule and Late Antiquity 4. Early Byzantine Period (4th-6th centuries) 5. Middle and Late Byzantine Period (7th-15th centuries) 6. Sources of Byzantine History (Historiographic, Chronographic, Hagiographic, etc.) 7. Latin Dominions in the Greek World 8. Archival Sources: Vocal and Silent—Their Use in Historical Science 9. Archival Records of Venetian Rulers in the Greek Territories on the Cloud 10. Periodizations and Timelines of Modern and Contemporary History: Mapping the Research Field 11. Diplomatic, Family, and Industrial Archives and Their Histories 12. From Newspapers and Ephemeral Sources to Media and Audiovisual Sources 13. Recap: Addressing Student Questions and Resolving Any Doubts

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 	
TEACHING ORGANIZATION	Activity	Workload/semester
<i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per</i>	Lectures	39
	Independent Study and Exam Preparation	86
	Study and Analysis of Sources and Bibliography	52
	Final Written Examination	3
	Total	180

<p><i>semester complies to ECTS standards.</i></p>	
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>- Oral Final Examination - Optional Written Assignment</p>

5. SUGGESTED BIBLIOGRAPHY

- R. Osborne, *Greece in the Making (1200-479 BC)*. London-NewYork, 2005.
- 4) Hall J. M., *Αρχαία ελληνική ιστορία: η αρχαϊκή περίοδος, 1200-479 π.Χ.* (ελληνική μτφρ. Ιωάννης Κ. Ξυδόπουλος). Θεσσαλονίκη, 2013.
- Δ. Δ. Χατζόπουλος, *Ιστορία του ρωμαϊκού κράτους*. Αθήνα, 2015.
- Β. Νεράντζη-Βαρμάζη, *Βυζαντινή Ιστορία 324-1453*, 2^η έκδ., Θεσσαλονίκη 2022 (Γράφημα).
- ArletteFarge, *Η γεύση του αρχείου*, εκδ. Νεφέλη. Αθήνα 2004.
- Ελπίδα Κ. Βόγλη, *Τα πεδία της ιστορίας στο παρελθόν και το παρόν της*, Αθήνα, εκδόσεις Πεδίο, 2023.
- MarcBloch, *Απολογία για την ιστορία. Το επάγγελμα του ιστορικού*, μτφρ. Κώστας Γαγανάκης, Αθήνα: Εναλλακτικές Εκδόσεις, 1994.
- E.H. Carr, *Τι είναι ιστορία; Σκέψεις για τη θεωρία της ιστορίας και το ρόλο του ιστορικού*, μτφρ. Αντρέας Παππάς, Αθήνα: Γνώση, 1999.
- FrançoisDosse, *Η ιστορία σε ψίχουλα. Από τα Annales στη "Νέα Ιστορία"*, μτφρ. Αγγελική Βλαχοπούλου, Ηράκλειο: Πανεπιστημιακές Εκδόσεις Κρήτης, 1993.
- Αντώνης Λιάκος, *Πώς το παρελθόν γίνεται ιστορία*; Αθήνα: Πόλις, 2007.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	P. TZIVARA
Contact details:	ptzivara@he.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Oral Final Examination Optional Written Assignment
Implementation Instructions: (3)	The oral final examination will be conducted via Skype on a date and time that will be announced in advance, along with details on its duration and content, within a reasonable timeframe before the examination. The optional written assignment must be submitted through eClass on a specified date.

(4) Please write YES or NO

(5) 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.

(6) 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.

COURSE OUTLINE

ART HISTORY

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	1 ST
COURSE TITLE	ART HISTORY		
TEACHING ACTIVITIES <i>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.</i>		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	6
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																		
Upon successful completion of the course, participants will be able to: <ul style="list-style-type: none"> • Describe, analyze, and date significant works and architectural monuments, using appropriate terminology and examples to support their arguments, • Acquire foundational knowledge that enables them to navigate collections, museums, and archaeological sites with ease, • Engage with bibliographic research tools and address issues related to the collection and documentation of monuments and works in the visual arts. 																		
General Skills <i>Name the desirable general skills upon successful completion of the module</i>																		
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<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>																	
<i>Teamwork</i>	<i>Critical thinking</i>																	
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>																	
<i>Working in an interdisciplinary environment</i>																		
<i>Production of new research ideas</i>																		

- Search, analysis and synthesis of data and information,
- ICT Use
- Equity and Inclusion
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1	Introduction
2	The work of art and its history
3	Drawing
4	Painting
5	Engraving
6	Sculpture
7	Architecture
8	The Internal expressive means of painting (Part I)
9	The Internal expressive means of painting (Part II)
10	Painting techniques
11	Thematic categories in painting
12	Main theories and methods of art study (Part I)
13	Main theories and methods of art study (Part II)

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Face to face • Lectures 												
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 												
TEACHING ORGANIZATION <i>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.</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><i>Activity</i></th> <th style="text-align: center;"><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">39</td> </tr> <tr> <td>Bibliographic research and analysis</td> <td style="text-align: center;">86</td> </tr> <tr> <td>Essay</td> <td style="text-align: center;">52</td> </tr> <tr> <td>Written examination</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">180</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	39	Bibliographic research and analysis	86	Essay	52	Written examination	3	Total	180
<i>Activity</i>	<i>Workload/semester</i>												
Lectures	39												
Bibliographic research and analysis	86												
Essay	52												
Written examination	3												
Total	180												
STUDENT EVALUATION <i>Description of the evaluation process Assessment Language, Assessment Methods, Formative or Concluding,</i>	Formative Mid-term written examination: 30% Final written examination: 70%												

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

5. SUGGESTED BIBLIOGRAPHY

1. Α. Χαραλαμπίδης, Τέχνη. Βλέπω – Γνωρίζω – Αισθάνομαι, Θεσσαλονίκη 2016.
2. Ν. Δασκαλοθανάσης, Ιστορία της Τέχνης. Η γέννηση μιας νέας επιστήμης από τον 19ο στον 20ο αιώνα, Αθήνα 2013.
3. Μ. Beardsley, Ιστορία των Αισθητικών Θεωριών, μετ.: Δ. Κούρτοβικ – Π. Χριστοδουλίδης, Αθήνα 1989.
4. Ε. Ν. Gombrich, Το χρονικό της τέχνης, Αθήνα 2011.
5. Ε. Panofsky, Μελέτες εικονολογίας. Ουμανιστικά θέματα στην Τέχνη της Αναγέννησης, μετ. Α. Παππάς, Αθήνα 1991.
6. D. Watkin, Ιστορία της Δυτικής Αρχιτεκτονικής, μετ.: Κ. Κουρεμένος, Αθήνα 2007.
7. Η. Wofflin, Βασικές έννοιες της Ιστορίας της Τέχνης, μετ.: Φ. Κοκαβέσης, Θεσσαλονίκη 1992.
8. Στ. Λυδάκης, Ορολογία Εικαστικών Τεχνών, Αθήνα 2009.
9. Α. Χαραλαμπίδης, Η τέχνη του εικοστού αιώνα, τόμ. 1-3, Θεσσαλονίκη 1990.
10. Χρ. Χρήστου, Θεωρία και ιστορία της νεώτερης τέχνης, Θεσσαλονίκη 1972.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	G. TSIGARAS
Contact details:	gtsigara@he.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Mid-term written examination: 30% Final written examination: 70%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(7) Please write YES or NO

(8) 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.

(9) 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.

<i>ICT Use</i>	<i>Respect for the natural environment</i>
<i>Adaptation to new situations</i>	<i>Sustainability</i>
<i>Decision making</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>
<i>Autonomous work</i>	<i>Critical thinking</i>
<i>Teamwork</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an international environment</i>	
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	
<ul style="list-style-type: none"> • 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 discrete mathematics: sets, propositional logic, Boolean algebra, and functions.
2. Combinatorics and graph theory.
3. Computer architecture and programming.
4. Variables, data types, and basic input/output operations.
5. Decision structures.
6. Loop structures.
7. Functions and modular programming.
8. Data structures: lists, arrays, collections.
9. Data structures: stacks, queues, graphs, and trees.
10. Recursion: solving problems with recursive functions.
11. Complexity and efficiency of algorithms.
12. Basic file handling.
13. Debugging and error handling.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)	<ul style="list-style-type: none"> • 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	Activity	Workload/semester
<i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised</i>	Lectures	26
	Laboratory Exercise	13
	Essay	37
	Projects	46
	Study and analysis of bibliography	55
	Written examination	3
	Total	180

<p><i>workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative Essay (compulsory): 50% Final written examination: 50%</p>

5. SUGGESTED BIBLIOGRAPHY

<ul style="list-style-type: none"> • Deitel, H., Daitel, P. (2014). C Προγραμματισμός, 7η Έκδοση. Εκδόσεις Μ. Γκιούρδας. • Schneider, D. (2016). Εισαγωγή στον προγραμματισμό με την Python. Εκδόσεις Μ. Γκιούρδας • Ζάχαρης, Ν. (2023). Επίλυση προβλημάτων με τη γλώσσα C# [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. https://dx.doi.org/10.57713/kallipos-204 • Κατωπόδης, Κ. (2016). Εισαγωγή στα Διακριτά Μαθηματικά. Εκδόσεις Ζήτη. • Μανής, Γ. (2015). Εισαγωγή στον Προγραμματισμό με αρωγό τη γλώσσα Python [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. https://dx.doi.org/10.57713/kallipos-749 • Μισυρλής, Ν. (2007). Εισαγωγή στον Προγραμματισμό με την C. 3η έκδοση. • Τζάλλας, Α., Γκόγκος, Χ., & Τσούλος, Ι. (2024). Μια σύγχρονη προσέγγιση στη γλώσσα C [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. https://dx.doi.org/10.57713/kallipos-394
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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.

(10) Please write YES or NO

(11) 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.

(12) 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.

COURSE OUTLINE

EDITING AND PUBLICATION OF DIGITAL AND DIGITISED RESOURCES FOR THE HUMANITIES

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	1 ST
COURSE TITLE	EDITING AND PUBLICATION OF DIGITAL AND DIGITISED RESOURCES FOR THE HUMANITIES		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																		
After successfully completing the course, participants will be able to: <ul style="list-style-type: none"> • Understand the principles and practices of digital curation and publishing in the humanities. • Apply contemporary metadata standards for organizing and managing digital material. • Use tools and platforms for curating and publishing digital content. • Integrate methods of open access and interoperability in digital humanities publications. • Critically approach issues of intellectual property and licensing in the digital domain. 																		
General Skills <i>Name the desirable general skills upon successful completion of the module</i>																		
<table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> <tr> <td><i>Production of new research ideas</i></td> <td></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>		<i>Production of new research ideas</i>	
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<i>Production of new research ideas</i>																		
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, 																		

- ICT Use
- Decision making
- Autonomous work
- Working in an interdisciplinary environment
- Working in an international environment
- Production of new research ideas
- Project design and management

3. COURSE CONTENT

1. **Introduction to Digital Curation in the Humanities**
 - Theory and practices of digital curation.
 - Humanities and digital transformation.
2. **Multimedia Data Management and Metadata**
 - Types of multimedia material in the humanities.
 - Metadata standards (e.g., Dublin Core, TEI).
3. **Digital Curation Tools**
 - Introduction to tools like Omeka, Scalar, and Content Management Systems (CMS).
 - Curation and organization of digital exhibitions and projects.
4. **Digital Publishing Platforms and Environments**
 - Application of digital platforms for publishing humanities content.
 - Use of systems for creating digital publications.
5. **Creation and Curation of Digital Publications**
 - Design and curation of digital materials.
 - Best practices for developing humanities digital publications.
6. **Standardization and Standards for Digital Publishing**
 - Standardization of digital materials for long-term preservation and use.
 - Application of standards such as XML, TEI, and RDF.
7. **Interoperability and Open Access**
 - Theory and practice of interoperability and open access.
 - Use of digital libraries and open-access platforms.
8. **Intellectual Property and Licensing**
 - Issues of copyright in digital curation.
 - Creative Commons and other licensing frameworks.
9. **Data Mining and Visualization**
 - Tools and techniques for data mining and visualization in the humanities.
10. **Design of Digital Exhibitions and Displays**
 - Creation of digital cultural exhibitions.
 - Examples of successful digital publishing projects.
11. **Curation of Digital Texts and Cultural Archives**
 - Curation of digital collections and cultural content archives.
 - Case studies in humanities digital publishing.
12. **Critical Analysis of Digital Publications**
 - Evaluation of digital humanities projects and publications.
 - Tools and methodologies for analyzing the success of digital projects.
13. **Capstone Project: Curation and Publishing of Digital Material**
 - Design and development of a digital humanities project.
 - Presentation and evaluation of the final project.

4. LEARNING & TEACHING METHODS - EVALUATION

<p style="text-align: center;">TEACHING METHOD</p> <p><i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Classroom lectures • Workshops • Active learning (hands-on learning) – Experiential learning • Collaborative group learning
<p style="text-align: center;">USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)</p>	<p>Use of ICT in teaching and communication with students</p> <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform

<p><i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<ul style="list-style-type: none"> • Student study of supplementary material related to course content • Communication with students via email 																
<p>TEACHING ORGANIZATION</p> <p><i>The ways and methods of teaching are described in detail.</i></p> <p><i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Workshops</td> <td>13</td> </tr> <tr> <td>Essay</td> <td>37</td> </tr> <tr> <td>Weekly projects</td> <td>46</td> </tr> <tr> <td>Independent study</td> <td>55</td> </tr> <tr> <td>Written examination</td> <td>3</td> </tr> <tr> <td>Total</td> <td>180</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Workshops	13	Essay	37	Weekly projects	46	Independent study	55	Written examination	3	Total	180
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Total	180																
<p>STUDENT EVALUATION</p> <p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative</p> <p>Weekly projects: 40%</p> <p>Essay (compulsory): 30%</p> <p>Final written examination: 30%</p>																

5. SUGGESTED BIBLIOGRAPHY

Burnard, L., & Bauman, S. (2012). Text encoding initiative: Guidelines for electronic text encoding and interchange. TEI Consortium.

Miller, S. J. (2015). Metadata for digital collections: A how-to-do-it manual. ALA Editions.

Pierazzo, E. (Ed.). (2015). Digital scholarly editing: Theories, models and methods. Routledge.

Schreibman, S., Siemens, R., & Unsworth, J. (Eds.). (2004). A companion to digital humanities. Wiley-Blackwell.

Bodenhamer, D. J., Corrigan, J., & Harris, T. M. (2010). The spatial humanities: GIS and the future of humanities scholarship. Indiana University Press.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXXXXXXXX
Contact details:	XXXXXXXXXX
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly projects: 40% Essay (compulsory): 30% Final written examination: 30%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(13) Please write YES or NO

(14) 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.

(15) 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.

2ND SEMESTER

COURSE OUTLINE
INTRODUCTION TO ARCHAEOLOGY

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	2ND
COURSE TITLE	INTRODUCTION TO ARCHAEOLOGY		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																
Upon successful completion of the course, participants will be able to: <ul style="list-style-type: none"> • Understand basic methods of field archaeology and use them. • Understand basic methods of dating. • Become acquainted with the categories of material culture investigated by Archaeology, the methodologies implemented in their study and the advantages of each approach. • Know the main theoretical approaches to Archaeology and their effect on archaeological research. 																
General Skills <i>Name the desirable general skills upon successful completion of the module</i>																
<table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>	
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>															
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<i>Working in an interdisciplinary environment</i>																

<i>Production of new research ideas</i>	
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information • ICT Use • Autonomous work • Equity and Inclusion • Working in an interdisciplinary environment • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promoting free, creative and inductive reasoning 	

3. COURSE CONTENT

1	Introduction	The history of research The relation of Archaeology to History and Anthropology
2	Methodologies	<ul style="list-style-type: none"> • Excavation • Survey
3	Methodologies: Non-invasive approaches	<ul style="list-style-type: none"> • Geophysical prospection • Coring • Aerial photographs
4	Relative chronology	<ul style="list-style-type: none"> • Stratigraphy • Typology of objects
5	Absolute chronology	<ul style="list-style-type: none"> • Radio-carbon dating • Dendrochronology (Tree ring dating) • Other radioactive dating methods
6	Palaeodiet: methodological approaches	
7	Archaeo-environment: methodological approaches	
8	Theoretical trends, applied methodology and interpretation	
9	The origins of Classical Archaeology	<ul style="list-style-type: none"> • Rediscovery of classical civilisation • Great Excavations, Grand Tour • Collectors and Travellers • Neoclassicism and archaeology
10	Classical Archaeology: Between Science and Art	<ul style="list-style-type: none"> • Periodization • Dating • Approaches
11	Written Sources and Classical Archaeology	<ul style="list-style-type: none"> • Genres • Ancient Greek, Latin. Byzantine • Pros and Cons
12	Classical Archaeology and Society	<ul style="list-style-type: none"> • Antiquities Trade • Politics • Cultural Management - education
13	Recap	<ul style="list-style-type: none"> • Recap and resolving questions • Student feedback

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication

<p><i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<p>through the eClass platform</p> <ul style="list-style-type: none"> • Student study of supplementary material related to course content • Communication with students via email 											
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th data-bbox="676 329 1015 365">Activity</th> <th data-bbox="1019 329 1347 365">Workload/semester</th> </tr> </thead> <tbody> <tr> <td data-bbox="676 371 1015 407">Lectures</td> <td data-bbox="1019 371 1347 407">39</td> </tr> <tr> <td data-bbox="676 414 1015 450">Study</td> <td data-bbox="1019 414 1347 450">138</td> </tr> <tr> <td data-bbox="676 456 1015 492">Written examination</td> <td data-bbox="1019 456 1347 492">3</td> </tr> <tr> <td data-bbox="676 499 1015 535">Total</td> <td data-bbox="1019 499 1347 535">180</td> </tr> </tbody> </table>		Activity	Workload/semester	Lectures	39	Study	138	Written examination	3	Total	180
Activity	Workload/semester											
Lectures	39											
Study	138											
Written examination	3											
Total	180											
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Concluding (questions with short answers and elaborating)</p> <p>Final written examination: 100%</p>											

5. SUGGESTED BIBLIOGRAPHY

TEXTBOOKS

- C. Renfrew και P. Bahn 2001. *Αρχαιολογία. Θεωρίες, Μεθοδολογία και Πρακτικές εφαρμογές.*
- I. Hodder 2010. *Διαβάζοντας το Παρελθόν. Τρέχουσες ερμηνευτικές προσεγγίσεις στην αρχαιολογία.*

OTHER

- Πλάντζος, Δ. 2011. *Ελληνική τέχνη και αρχαιολογία 1200-30 π.Χ.* Αθήνα. [κεφάλαιο 1]
- Πλάντζος, Δ. 2014. *Οι αρχαιολογίες του κλασικού.* Αθήνα.
- Κόκκου, Α. 2009. *Η μέριμνα για τις αρχαιότητες στην Ελλάδα και τα πρώτα μουσεία.* Αθήνα

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	DUSHKA CHRISTINA UREM-KOTSOU
Contact details:	durem@he.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Final written examination: 100%
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.

(16) Please write YES or NO

(17) 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.

(18) 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.

COURSE OUTLINE

PROGRAMMING FOR APPLICATIONS IN ARTS AND 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	2 ND
COURSE TITLE	PROGRAMMING FOR APPLICATIONS IN ARTS AND CULTURE		
TEACHING ACTIVITIES <i>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.</i>		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	6
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Recognise the advantages of using object-oriented programming to manage complex systems and cultural data. • Understand and apply the principles of object-oriented programming to develop applications in the arts and culture sector. • Effectively utilise the potential of object-oriented programming for managing complex systems and cultural data. • Design and implement classes, objects, and inheritance structures to write modular, reusable code suitable for applications in the cultural domain. • Manipulate files for storing and retrieving cultural data in object-oriented programming-based applications. • Develop interactive applications that integrate multimedia cultural content using object-oriented programming methods. • Apply design patterns and best practices in object-oriented programming to enhance the structure and efficiency of cultural applications. • Collaborate in writing code, using version control systems, and following workflows for software development. • Employ application testing and debugging techniques in object-oriented programming to ensure software reliability.
General Skills <i>Name the desirable general skills upon successful completion of the module</i>

Search, analysis and synthesis of data and information, ICT Use Adaptation to new situations Decision making Autonomous work Teamwork Working in an international environment Working in an interdisciplinary environment Production of new research ideas	Project design and management Equity and Inclusion Respect for the natural environment Sustainability Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning
<ul style="list-style-type: none"> • 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

14. Introduction to Object-Oriented Programming: Transitioning from structured to object-oriented programming
15. Classes and Objects: The foundational building blocks of object-oriented programming
16. Basic Concepts: Encapsulation and data management
17. Basic Concepts: Inheritance and polymorphism
18. Basic Concepts: Abstract classes and interfaces
19. I/O Streams and File Handling
20. Interfacing with Cultural Databases
21. Collaborative Coding: Version control systems
22. Event-Based Programming and Graphical User Interfaces
23. Integration of Third-Party Libraries and Application Programming Interfaces (APIs)
24. Testing and Debugging
25. Software Design Standards
26. The Software Life Cycle

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 																
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	<ul style="list-style-type: none"> • 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 <i>The ways and methods of teaching are described in detail.</i> <i>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.</i>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Laboratory Exercise</td> <td>13</td> </tr> <tr> <td>Essay</td> <td>37</td> </tr> <tr> <td>Projects</td> <td>46</td> </tr> <tr> <td>Study and analysis of bibliography</td> <td>55</td> </tr> <tr> <td>Written examination</td> <td>3</td> </tr> <tr> <td>Total</td> <td>180</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Laboratory Exercise	13	Essay	37	Projects	46	Study and analysis of bibliography	55	Written examination	3	Total	180
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<p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative Essay (compulsory): 50% Final written examination: 50%</p>

5. SUGGESTED BIBLIOGRAPHY

<ul style="list-style-type: none"> • Taher, R. (2019). Hands-On Object-Oriented Programming with C#: Build maintainable software with reusable code using C. Packt Publishing Ltd. • Schildt, H. (2009). Οδηγός της C# 3.0. Εκδόσεις Μ. Γκιούρδας • Μαγκούτης, Κ., & Νικολάου, Χ. (2015). Εισαγωγή στον Αντικειμενοστραφή Προγραμματισμό με Python [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. https://dx.doi.org/10.57713/kallipos-829
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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.

(19) Please write YES or NO

(20) 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.

(21) 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.

COURSE OUTLINE

DATABASE DESIGN AND MANAGEMENT IN THE ARTS AND 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	2ND
COURSE TITLE	DATABASE DESIGN AND MANAGEMENT IN THE ARTS AND CULTURE		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>
<p>Upon successful completion of the course, participants will be able to:</p> <ol style="list-style-type: none"> 1. Understand the Theory and Fundamental Principles of Databases and Their Importance in the Cultural Sector. <ul style="list-style-type: none"> ○ Gain a solid foundation in database concepts and how they support the management and preservation of cultural information. 2. Design and Develop Databases to Meet the Needs of Cultural Organizations. <ul style="list-style-type: none"> ○ Apply database design principles to create structures that effectively organize and maintain data for museums, libraries, archives, and other cultural institutions. 3. Use SQL for Data Management and Retrieval. <ul style="list-style-type: none"> ○ Utilize Structured Query Language (SQL) to perform efficient data operations, including inserting, updating, deleting, and querying information from databases. 4. Integrate Databases into Web and Cultural Information Systems. <ul style="list-style-type: none"> ○ Embed databases within online platforms and information systems, enhancing access to and interaction with cultural content. 5. Apply Security and Interoperability Principles in Managing Cultural Data. <ul style="list-style-type: none"> ○ Ensure data protection and establish interoperable systems, allowing secure and standardized access to cultural information across different platforms and organizations.
General Skills <i>Name the desirable general skills upon successful completion of the module</i> <i>Search, analysis and synthesis of data and Project design and management</i>

<i>information,</i> <i>ICT Use</i> <i>Adaptation to new situations</i> <i>Decision making</i> <i>Autonomous work</i> <i>Teamwork</i> <i>Working in an international environment</i> <i>Working in an interdisciplinary environment</i> <i>Production of new research ideas</i>	<i>Equity and Inclusion</i> <i>Respect for the natural environment</i> <i>Sustainability</i> <i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i> <i>Critical thinking</i> <i>Promoting free, creative and inductive reasoning</i>
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, • ICT Use • Decision making • Autonomous work • Working in an interdisciplinary environment • Working in an international environment • Production of new research ideas • Project design and management 	

3. COURSE CONTENT

1. **Introduction to Databases and the Cultural Sector**
 - Fundamental principles of databases.
 - Applications in the field of arts and culture.
2. **Data Requirements Analysis in the Arts and Culture**
 - Understanding data and structures in cultural collections.
 - Characteristics of cultural data (artworks, archaeological finds, historical references).
3. **Modeling and Logical Database Design**
 - Entity and Relationship Design: introduction to ERD (Entity-Relationship Diagrams).
 - Data modeling tools.
 - Relational databases.
4. **Normalization of Data and Ensuring Integrity**
 - Normalization theory.
 - Common errors and ways to avoid them.
5. **Introduction to SQL (Structured Query Language)**
 - Basic SQL commands: SELECT, INSERT, UPDATE, DELETE.
 - Data retrieval and management via SQL.
6. **Creating and Managing Databases**
 - Creating databases with SQL.
 - Connecting with Database Management Systems (DBMS).
7. **Advanced SQL Queries and Reports**
 - Complex SQL commands (JOIN, GROUP BY, HAVING, etc.).
 - Creating and exporting reports.
8. **Database Management Systems (DBMS) for Culture**
 - Using MySQL, PostgreSQL, and other DBMS for cultural management.
 - Practical exercises in database creation.
9. **Connecting Cultural Systems with Databases**
 - Integrating databases into websites and cultural systems.
 - API applications and interoperability with other platforms.
10. **Metadata and Interoperability**
 - Using metadata standards such as Dublin Core for organizing cultural data.
 - Archiving and data sharing systems.
11. **Database Security**
 - Data security principles.
 - Applying techniques to protect sensitive cultural data.
12. **Databases in Museums and Cultural Centers**

- Real-world examples of database use in museums, galleries, and cultural institutions.
 - Case studies and analysis of successful projects.
13. **Capstone Project: Database Design for Cultural Management**
- Developing a complete database project for a cultural institution.
 - Presentation and evaluation of the project.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Classroom lectures • Workshops • Active learning (hands-on learning) – Experiential learning • Collaborative group learning 																
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<p>Use of ICT in teaching and communication with students</p> <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 																
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><i>Activity</i></th> <th style="text-align: center;"><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">26</td> </tr> <tr> <td>Workshops</td> <td style="text-align: center;">13</td> </tr> <tr> <td>Essay</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Weekly projects</td> <td style="text-align: center;">46</td> </tr> <tr> <td>Independent study</td> <td style="text-align: center;">55</td> </tr> <tr> <td>Written examination</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">180</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	26	Workshops	13	Essay	30	Weekly projects	46	Independent study	55	Written examination	3	Total	180
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assessment and how students are informed

5. SUGGESTED BIBLIOGRAPHY

- Burnard, L., & Bauman, S. (2012). Text encoding initiative: Guidelines for electronic text encoding and interchange. TEI Consortium.
- Miller, S. J. (2015). Metadata for digital collections: A how-to-do-it manual. ALA Editions.
- Pierazzo, E. (Ed.). (2015). Digital scholarly editing: Theories, models and methods. Routledge.
- Schreibman, S., Siemens, R., & Unsworth, J. (Eds.). (2004). A companion to digital humanities. Wiley-Blackwell.
- Bodenhamer, D. J., Corrigan, J., & Harris, T. M. (2010). The spatial humanities: GIS and the future of humanities scholarship. Indiana University Press.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXXXXXXXX
Contact details:	XXXXXXXXXX
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly projects: 40% Essay (compulsory): 30% Final written examination: 30%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(22) Please write YES or NO

(23) 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.

(24) 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.

COURSE OUTLINE

STATISTICS

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	2 ND
COURSE TITLE	STATISTICS		
TEACHING ACTIVITIES <i>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.</i>		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	6
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	SCIENTIFIC AREA		
PREREQUISITES:	NO		
TEACHING & EXAMINATION LANGUAGE:	GREEK, ENGLISH		
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, students will be able to:

1. Understand the fundamental principles of descriptive statistics and apply appropriate graphical methods and frequency tables for data analysis.
2. Calculate and interpret measures of central tendency (such as mode, median, and mean) as well as measures of variability (such as range, variance, and standard deviation).
3. Apply linear regression techniques (simple and multiple linear regression) and understand concepts of the standard error of the estimate and the correlation coefficient.
4. Conduct and interpret statistical sample comparison tests such as the t-test, χ^2 -test, and analysis of variance (ANOVA).
5. Recognize and apply more advanced statistical techniques, including cluster analysis, principal component analysis, and correspondence analysis.
6. Analyze time series and understand the importance of time series analysis in studying data that evolves over time.
7. Use statistical models to interpret and predict data, drawing valid and reliable conclusions from sample data.
8. Apply the above methods to real data analysis through exercises and examples from the humanities and other fields.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,

*Project design and management
Equity and Inclusion*

ICT Use Adaptation to new situations Decision making Autonomous work Teamwork Working in an international environment Working in an interdisciplinary environment Production of new research ideas	Respect for the natural environment Sustainability Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using the necessary technologies • Adaptation to new situations • Decision-making • Work in an interdisciplinary environment • Generation of new research ideas • Demonstration of social, professional and ethical responsibility and sensitivity to gender issues • Development of criticism and self-criticism • Promotion of free, creative and inductive thinking • Respect for diversity and multiculturalism 	

3. COURSE CONTENT

1	Knowledge/understanding.	Introduction. Graphical methods and data types. Frequency tables.
2	Knowledge/understanding.	Probabilities. Central tendency and diversity. Measures of central tendency: mode, median, mean. Measures of variability: Range, percentage points, dispersion, standard deviation, etc.
3	Knowledge/understanding.	Linear regression, Least squares method, Standard errors, variance. Correlation coefficient
4	Knowledge/understanding.	t-test, x2 test and univariate ANOVA
5	Exercises	Exercises
6	Knowledge/understanding.	Simple and multiple regression
7	Knowledge/understanding.	Cluster analysis
8	Exercises	Exercises
9	Knowledge/understanding.	Principal component analysis
10	Knowledge/understanding.	Correspondence analysis
11	Exercises	Exercises
12	Knowledge/understanding.	Time Series Analysis
13	Exercises	Exercises

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 						
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 						
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>Lectures, Seminars, Laboratory</i>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Laboratories</td> <td>13</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Laboratories	13
Activity	Workload/semester						
Lectures	26						
Laboratories	13						

<p><i>Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	Final Assignment	37
	Weekly Projects / Exercises	46
	Independent Study	55
	Final Examination	3
	Total	180
<p>STUDENT EVALUATION Description of the evaluation process</p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	Final exams at the end of the semester.	

5. SUGGESTED BIBLIOGRAPHY

<p>6. Κοινωνική στατιστική Κωδικός Βιβλίου στον Εύδοξο: 30177 Έκδοση: 1η έκδ./2003 Συγγραφείς: Καλαματιανού Αγγαΐα Γ. ISBN: 978-960-02-1686-8 Τύπος: Σύγγραμμα Διαθέτης (Εκδότης): ΕΚΔΟΣΕΙΣ ΠΑΠΑΖΗΣΗ ΑΕΒΕ</p> <p>Στατιστική: Ανάλυση δεδομένων με χρήση της R Κωδικός Βιβλίου στον Εύδοξο: 86055461 Έκδοση: 1η έκδ./2019 Συγγραφείς: Witte Robert, Witte John, Ανδρουλάκης Γεώργιος, Κουνετάς Κωνσταντίνος ISBN: 9789605863098 Τύπος: Σύγγραμμα Διαθέτης (Εκδότης): ΕΚΔΟΣΕΙΣ ΚΡΙΤΙΚΗ ΑΕ</p>
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ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	K. ZAFEIRIS
Contact details:	kzafiris@he.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Final exams at the end of the semester
Implementation Instructions: (3)	The written assessments and final examination will be conducted via eClass on a date and time announced in advance, along with the duration and content, providing adequate notice prior to the scheduled exams. The assignment will be submitted through eClass by a specified deadline.

(25) Please write YES or NO

(26) 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.

(27) 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.

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

3. COURSE CONTENT

1. Violence and aggression – Definition and theoretical conceptualization.
2. Educator’s symbolisms – Aggressive behavior in the context of school, bullying
3. Language and communication – Verbal and nonverbal communication, social indexes of language and identity dynamics. Language and ICT.
4. Culture – The meaning of cultural context and the intercultural approach in educational settings.
5. Cultural challenges in the contemporary school context.
6. Identity and diversity – Processes and dynamics underline identity formation
7. Social representations and the construction of social world.
8. Co-operation and competition – Mixed motives and structure of interdependence.
9. Dyads, small groups and intergroup relations – Conflict resolution in the school context.
10. Group performance – Process loss, social facilitation and social inhibition. Social loafing.
11. individual performance in the social context – typology of group tasks and enhancement of performance.
12. Crisis management – Definition and theoretical context. Examples of crisis in classroom and methods to cope with.
13. Bullying and cyber bullying – Definition, forms, motives, the role of bystander, intervention and prevention.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	Face to face	
USE OF INFORMATION & COMMUNICATION TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	E class, e mail, live streaming	
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i>	Activity	Workload/semester
	Classes attendance	39
	Individual reading and preparatio	85

<p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</p>	n for the written exams	
	Essay writing (literature review)	51
	Written examination	5
	TOTAL	180
<p>STUDENT EVALUATION</p> <p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Essay writing (literature review) – 30%</p> <p>Written examination at the end of the semester – 70%</p>	

5. SUGGESTED BIBLIOGRAPHY

Textbooks:

1. Hogg, M.A. & Vaughan, G.M. (2010). Κοινωνική ψυχολογία (επιμέλεια Αλεξάνδρα Χαντζή). Αθήνα: Gutenberg.
2. Hewstone, M & Stroebe, W. (2007). Εισαγωγή στην κοινωνική ψυχολογία (επιμέλεια Γιώργος Γαλάνης). Αθήνα – Παπαζήσης.

Other Suggested Bibliography

1. Hogg, M.A. (2016). Εγχειρίδιο κοινωνικής ψυχολογίας: Διεργασίες ομάδας (Επιμέλεια Α. Παπαστυλιανού). Αθήνα: Gutenberg.
2. Κοκκινάκη, Φ. (2005). Κοινωνική Ψυχολογία: εισαγωγή στη μελέτη της κοινωνικής συμπεριφοράς. Αθήνα: Εκδόσεις Τυπωθήτω.
3. Smith, P.B. (2011). Διαπολιτισμική κοινωνική ψυχολογία (Επιμέλεια Α. Παπαστυλιανού). Αθήνα: Gutenberg.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	E. LAMPRIDIS
Contact details:	elamprid@he.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Essay writing (literature review) – 30% Written examination at the end of the semester – 70%
Implementation Instructions: (3)	Detailed information are uploads at the e class of the course. Students electronically submit their essays until the 10 th week of classes. Written examination through e class platform. Students answer to 30 multiple choice questions randomly presented to each student. Time for answering each question two minutes. In order to pass the course students should answer correctly at least to 50%of the questions. The final mark is calculated taking into account students' performance in the essay as presented above.

(28) Please write YES or NO

(29) Notedowntheevaluationmethodsusedbytheteacher, 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.

(30) 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.

3RD SEMESTER

COURSE OUTLINE

CULTURAL STUDIES: INTERDISCIPLINARY APPROACHES

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	3 RD
COURSE TITLE	CULTURAL STUDIES: INTERDISCIPLINARY APPROACHES		
TEACHING ACTIVITIES <i>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.</i>		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	6
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>
<p>After the successful completion of the course, participants are expected to:</p> <ul style="list-style-type: none"> • Conceptually define "culture." • Understand the historical evolution of the term from the Renaissance until the 21st century. • Acquire knowledge and skills for the understanding and interpretation of culture. • Recognize and investigate the relationship between culture and society, with an emphasis on the era of globalization. • Comprehend the interactive relationship between the scientific fields of History, Archaeology, (Social) Anthropology, and religions with culture. • Research printed and digital sources and collect data related to the course topics. • Understand the basic concepts of documenting cultural data through simple digital means (photography, archiving, categorizing information). • Realize the position of culture in contemporary school curricula. • Appreciate the information and knowledge they receive and select the topic for their assignments. • Utilize sources critically, relate them, and compare them. • Collaborate on group projects. • Compose an assignment on a topic of their choice. • Evaluate their work with reasoned arguments.

General Skills	
<i>Name the desirable general skills upon successful completion of the module</i>	
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>
<i>ICT Use</i>	<i>Equity and Inclusion</i>
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>
<i>Decision making</i>	<i>Sustainability</i>
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>
<i>Teamwork</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using the appropriate technologies • Decision making • Autonomous work • Teamwork • Working in an interdisciplinary environment • Respect for diversity and multiculturalism • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promotion of free, creative, and inductive thinking 	

3. COURSE CONTENT

1	Introduction, organization of the course.
2	Assignment of topics for projects. Seminar on scientific writing.
3	Culture: conceptual clarifications. –Introduction to interdisciplinary studies of Culture.
4	Archaeology and Culture: The contribution of archaeology to the understanding of culture.
5	History and Culture: cultural changes and historical events.
6	Anthropology and Culture: Dorism, Exchange, and Economy: Anthropological Cosmologies.
7	Intercultural encounters: Identities and Differences. –The body and embodied cosmologies: Rituals, Performances, and Symbols.
8	Mass Media and Culture: the cultural industry.
9	Culture and Technology: Introduction to Digital Cultural Heritage. Digital art. Simple searches of cultural data.
10	Gender and Culture: the contribution of genders to cultural production.
11	Religion - Culture: relationships and interrelations.
12	Religions and doctrines in Greece, the Balkans, and the Black Sea region. Christianity, Islam, and art in Greece, the Balkans, and the Black Sea region.
13	Evaluative assessment of the course.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Face-to-face lectures • Differentiated teaching • Online communication for guidance and feedback during the completion of assignments • Collaboration among student groups
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)	<ul style="list-style-type: none"> • Use of ICT in Teaching and Communication with students: • PowerPoint presentations

<p><i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<ul style="list-style-type: none"> • Videos • Utilization of multimodal-multimedia material in teaching • Communication and coordination of study and assignment preparation through e-class and social media platforms 														
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Interactive Teaching</td> <td>30</td> </tr> <tr> <td>Study and Analysis of Bibliography</td> <td>47</td> </tr> <tr> <td>Writing Assignments (Individual or Group)</td> <td>61</td> </tr> <tr> <td>Examinations</td> <td>3</td> </tr> <tr> <td>Total</td> <td>180</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	39	Interactive Teaching	30	Study and Analysis of Bibliography	47	Writing Assignments (Individual or Group)	61	Examinations	3	Total	180
Activity	Workload/semester														
Lectures	39														
Interactive Teaching	30														
Study and Analysis of Bibliography	47														
Writing Assignments (Individual or Group)	61														
Examinations	3														
Total	180														
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Assignment: 40%</p> <p>Final written examination:: 60%</p>														

5. SUGGESTED BIBLIOGRAPHY

1. Appadurai, A. (1996). *Modernity At Large: Cultural Dimensions of Globalization*. Minneapolis: University of Minnesota Press.
2. Bagby, P. (2022). *Culture and History: Prolegomena to the Comparative Study of Civilizations*. Berkeley: University of California Press.
3. Βιτσιλάκη, Χρ. (επιμ.) (2007). *Φύλο και Πολιτισμός*. Αθήνα: Ατραπός.
4. Ferguson, N. (2012). *Πολιτισμός*. Αθήνα: Παπαδόπουλος.
5. Florofsky, G. (2008). *Χριστιανισμός και Πολιτισμός*. Θεσσαλονίκη: ΠΟΥΡΝΑΡΑΣ.
6. Μακρή, Γ. (2011). *Ισλάμ. Πεποιθήσεις, πρακτικές και τάσεις*. Αθήνα: Εκδόσεις Πατάκη.

7. Marcus E. G. & Fischer M.J. M. (2016). *Η Ανθρωπολογία ως κριτική του πολιτισμού. Μια πειραματική στιγμή στις επιστήμες του ανθρώπου*. Αθήνα: ΗΡΙΔΑΝΟΣ.
8. Pacey, A. (1985). *The Culture of Technology*. Cambridge: The MIT Press.
9. Τσιτσανούδη-Μαλλίδη, Ν. (επιμ.) (2017). *Ελληνική Γλώσσα, Πολιτισμός και ΜΜΕ. Από την αρχαιοελληνική γραμματεία έως σήμερα*. Αθήνα: Gutenberg.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	M. DIMASI
Contact details:	mdimasi@bscc.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Assignment: 40% Final written examination: 60%
Implementation Instructions: (3)	The submission of assignments and the written exam will take place via e-Class on a predetermined date.

(31) Please write YES or NO

(32) 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.

(33) 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.

COURSE OUTLINE

THE EVOLUTION OF PERFORMING ARTS: MUSIC AND STAGE ARTS FROM ANTIQUITY TO THE PRESENT

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	3 RD
COURSE TITLE	THE EVOLUTION OF PERFORMING ARTS: MUSIC AND STAGE ARTS FROM ANTIQUITY TO THE PRESENT		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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:

- Recognize the key historical milestones in the evolution of the performing arts from antiquity to the present, with an emphasis on music, theater, dance, and contemporary performance art.
- Analyze the social, political, and cultural influences that have shaped the development and formation of the performing arts in various historical periods.
- Explain the enduring relationship between the performing arts and social changes, as well as the formation of cultural identities.
- Explore the role of technology in shaping the performing arts and in the development of new forms of artistic expression, such as contemporary performance art.
- Connect the performing arts to the historical and political conditions of each era, understanding the interaction between the arts and society.
- Evaluate the aesthetic and technological innovations that have influenced the evolution of the performing arts, identifying the defining elements that differentiate various periods.
- Understand the evolution of the performing arts through the interaction between different art forms (music, dance, theater, performance) and their social implications.

General Skills

Name the desirable general skills upon successful completion of the module

<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>
<i>ICT Use</i>	<i>Equity and Inclusion</i>
	<i>Respect for the natural environment</i>

<p><i>Adaptation to new situations</i></p> <p><i>Decision making</i></p> <p><i>Autonomous work</i></p> <p><i>Teamwork</i></p> <p><i>Working in an international environment</i></p> <p><i>Working in an interdisciplinary environment</i></p> <p><i>Production of new research ideas</i></p>	<p><i>Sustainability</i></p> <p><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></p> <p><i>Critical thinking</i></p> <p><i>Promoting free, creative and inductive reasoning</i></p>
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, • Autonomous work • Teamwork • Working in an interdisciplinary environment. • Equity and Inclusion • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promoting free, creative and inductive reasoning 	

3. COURSE CONTENT

1	<ul style="list-style-type: none"> • Introduction • Music: From Ancient Music to Medieval Music Tradition 	<ul style="list-style-type: none"> • Familiarization with students and presentation of the course content, objectives, learning outcomes, and requirements. • Ancient Greek and Roman music and its evolution during the Middle Ages, including religious and secular forms.
2	<ul style="list-style-type: none"> • Music: Renaissance and Baroque: From Polyphony to Opera 	<ul style="list-style-type: none"> • The development of polyphonic music, monody, and the birth of opera in Italy and its spread across Europe.
3	<ul style="list-style-type: none"> • Music: The Classical Era: Symmetrical Structure and Sound Balance 	<ul style="list-style-type: none"> • Examination of the Classical Era focusing on great composers such as Mozart, Haydn, and Beethoven. Analysis of the innovations and musical ideas of the period, without focusing on the technical rules of harmony and form.
4	<ul style="list-style-type: none"> • Music: Romanticism and Impressionism 	<ul style="list-style-type: none"> • Analysis of the main characteristics of 19th-century music, the evolution of forms, and the new composers who contributed to the development of Romanticism and Impressionism.
5	<ul style="list-style-type: none"> • Music: Contemporary Music: From Twelve-Tone Technique to Jazz, Minimalism, and Electronic Music 	<ul style="list-style-type: none"> • Analysis of the evolution of music in the 20th and 21st centuries, including twelve-tone technique, minimalism, electronic music, and contemporary trends in composition.
6	<ul style="list-style-type: none"> • Theater: Ancient Greek and Roman Theater: Principles and Developments 	<ul style="list-style-type: none"> • Examination of the theater of ancient Greece and Rome, focusing on the building, genres, and dramaturgy.
7	<ul style="list-style-type: none"> • Theater: Medieval Theater and Religious Dramas 	<ul style="list-style-type: none"> • Analysis of the forms of theater that emerged during the Middle Ages, with an emphasis on religious events, miracles, and mysteries.
8	<ul style="list-style-type: none"> • Theater: Renaissance and Classical Theater: From Shakespeare to Molière – The Modern Greek Theater 	<ul style="list-style-type: none"> • Study of the flourishing of theater during the Renaissance and Classicism, with examples from England, France, Spain, and Greece.
9	<ul style="list-style-type: none"> • Theater: Modern Theater: 	<ul style="list-style-type: none"> • The development of new forms of theatrical expression in the 19th and 20th centuries in Greece

	Realism, Naturalism, and Theatre of the Absurd	and the rest of Europe.
10	• Theater: Epic Theater: Brecht and the Political Dimension of the Stage	• Examination of epic theater focusing on Brecht and his ideas about social and political theater, and the influence of epic theater on contemporary stage art.
11	• Dance: The Evolution and Context of Development of Artistic, European, Latin American, Modern, and Contemporary Forms of Dance	• Historical overview of different Western dance genres, key representatives, their works, and their social dimensions.
12	• Dance: The Evolution of Greek Dance and the Conditions of Its Formation	• Historical overview of Greek dance, ethnographic presentation, the distinct dance genres, the conditions of its formation, and the dance practice in the modern Greek context.
13	• Contemporary Performance Art: Historical Context and Avant-Garde Approaches • Recap	• Historical overview and analysis of significant works and artists in contemporary performance art, emphasizing conceptual and political dimensions. • Recap and resolution of questions. • Student feedback on the course.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 														
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	<p>Use of ICT in teaching and communication with students</p> <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 														
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><i>Activity</i></th> <th style="text-align: center;"><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">39</td> </tr> <tr> <td>Essay</td> <td style="text-align: center;">37</td> </tr> <tr> <td>Weekly Projects / Tests</td> <td style="text-align: center;">46</td> </tr> <tr> <td>Bibliographic research & analysis</td> <td style="text-align: center;">55</td> </tr> <tr> <td>Written examination</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">180</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	39	Essay	37	Weekly Projects / Tests	46	Bibliographic research & analysis	55	Written examination	3	Total	180
<i>Activity</i>	<i>Workload/semester</i>														
Lectures	39														
Essay	37														
Weekly Projects / Tests	46														
Bibliographic research & analysis	55														
Written examination	3														
Total	180														
STUDENT EVALUATION <i>Description of the evaluation process</i>	<p>Formative</p> <p>Weekly Projects: 20%</p>														

<p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Assignment (mandatory): 30% Final Exam: 50%</p>
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5. SUGGESTED BIBLIOGRAPHY

Music

1. Parker, R. (1994), The Oxford illustrated history of opera, Oxford; New York: Oxford University Press, Oxford.
2. West, M. L. (1992). Ancient Greek Music, Oxford: Clarendon Press (= Αρχαία Ελληνική μουσική, μτφρ. Σ. Κομνηνός, Αθήνα: Παπαδήμας 1999).
3. Βυλερμόζ, Ε. (1978) Ιστορία της Μουσικής – Α΄ και Β΄ Τόμος. Αθήνα

Theater - Performance Art

1. Avgitidou, A. (2023) Performance Art: Education and Practice, New York: Routledge
2. Fischer-Lichte, E. (2011/2012), Ιστορία Ευρωπαϊκού δράματος και θεάτρου 1. Από την αρχαιότητα στους Γερμανούς κλασικούς. Ιστορία του θεατρικού δράματος 2. Από τον ρομαντισμό έως σήμερα Αθήνα: Πλέθρον
3. Storey C.I., Allan, A. (2024), Εισαγωγή στο Αρχαίο Ελληνικό Θέατρο (Επιμέλεια: Ανδρέας Μαρκαντωνάτος, Γεώργιος Τσομής, Ελένη Μπολιάκη, Αθηνά Καβουλάκη, Ανδρέας Αντωνόπουλος), Αθήνα: Gutenberg
4. Ταμπάκη, Α., Σπυριδοπούλου, Μ., & Αλτουβά, Α. (2015). Ιστορία και Δραματολογία Ευρωπαϊκού Θεάτρου [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. <https://dx.doi.org/10.57713/kallipos-737>

Dance

1. Grove L., (2013), The History of Dance: Ballet, London: Red Books Ltd.
2. Craine & Mackrell, (2002). Oxford Dictionary of Dance, Oxford University Press, New York.
3. Δήμας, Η. Β. Τυροβολά & Μ. Κουτσούμπα, (2010), Ελληνικός Παραδοσιακός Χορός. Αθήνα.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	G. TSOMIS
Contact details:	gtsomis@helit.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly Projects: 20% Assignment (mandatory): 30% Final Exam: 50%
Implementation Instructions: (3)	Written assessments and the final exam will be conducted via eClass 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.

(34) Please write YES or NO

(35) 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.

(36) 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.

COURSE OUTLINE

DATA SCIENCE FOR HUMANITIES: DATA EXTRACTION, CURATION AND ANALYSIS

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	3 RD
COURSE TITLE	DATA SCIENCE FOR HUMANITIES: DATA EXTRACTION, CURATION AND ANALYSIS		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>										
Upon successful completion of the course, participants will be able to: <ul style="list-style-type: none"> • Recognize and extract data from public databases and websites. • Use Python libraries for analyzing and processing image, text, and digitized document data. • Understand the nature and functioning of data collections in the humanities. • Apply tools for web scraping, API usage, and database management. • Organize and document humanities data (data curation). • Apply preprocessing techniques for cleaning and formatting text and image data. • Use Python libraries for preparing data for analysis or machine learning models. • Address data issues such as missing data, outliers, and inappropriate formats. • Analyze text and image data and produce quantitative and qualitative analyses. • Engage in discussions on the ethical aspects of data analysis in the humanities. 										
General Skills <i>Name the desirable general skills upon successful completion of the module</i>										
<table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>
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<i>ICT Use</i>	<i>Equity and Inclusion</i>									
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>									
<i>Decision making</i>	<i>Sustainability</i>									
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>									

<i>Teamwork</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, ICT Use • Decision making • Autonomous work • Working in an international environment • Working in an interdisciplinary environment • Project design and management • Production of new research ideas 	

3. COURSE CONTENT

<ol style="list-style-type: none"> 1. Introduction to data science and its application in the humanities. 2. Data and databases in the humanities: Structured and unstructured data in the humanities, sources of data in the humanities. 3. Data retrieval and management from databases (e.g., digitized libraries, museums). 4. Web scraping techniques for extracting data from websites (e.g., archives, digital museums). Use of APIs to obtain data from online platforms. Python tools (e.g., BeautifulSoup, Scrapy, Requests, Tweepy). 5. Data curation and preprocessing: <ul style="list-style-type: none"> ○ Curation and organization of data for analysis. Ensuring data quality: cleaning, transforming, and formatting data. ○ Preprocessing: text and image preprocessing techniques. 6. Data curation and preprocessing: Introduction to pandas and practical applications. 7. Text analysis for the humanities: Techniques for extracting and analyzing data from historical and literary archives. Introduction to topic modeling and sentiment analysis in texts. 8. Data analysis for literary research: Data sources for literary research (digitized texts, ancient texts, digital archives). Application of natural language processing (NLP) to literary text analysis (nltk, spaCy, gensim). 9. Image analysis and digitized artifacts in the humanities fields (art, archaeology, historical documents). Application of image processing methods to archaeological artifacts and artworks. Analysis of image data collections. 10. Introduction to computer vision: Machine learning and cultural heritage images for tasks like pattern recognition, classification, and clustering of images with Python (e.g., TensorFlow, Keras, OpenCV). 11. Data visualization in humanities datasets. 12. Ethical issues and challenges in data analysis in the humanities. 13. Case studies.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Face to face • Workshops • Hands-on learning • Team work 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students - PPT presentations - Use of digital tools and platforms - Teaching materials, announcements and communication through the eClass platform - Study by students of supporting material relevant to the course content - Communication with students via email	
TEACHING ORGANIZATION <i>The ways and methods of teaching</i>	Activity	Workload/semester
	Lectures	26

<p>are described in detail. <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	Workshop	13
	End of semester assignment	37
	Weekly projects/tests	46
	Independent study	55
	Final exam	3
	Total	180
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	Weekly projects: 40% Assignment (compulsory): 30% Final exam: 30%	

5. SUGGESTED BIBLIOGRAPHY

Jurafsky, D. and James H. Martin. 2023. *Speech and Language Processing*, Pearson Education, 3rd edition, 2023, ISBN-13: 978-0135041963.

Lesk Michael, *Understanding Digital Libraries*, Second Edition, Elsevier.

McGillivray, Barbara et al. 2020. *The challenges and prospects of the intersection of humanities and data science: A White Paper from The Alan Turing Institute*. Figshare. [dx.doi.org/10.6084/m9.figshare.12732164](https://doi.org/10.6084/m9.figshare.12732164)

Schiama Giovanni, and Daniela Carlucci. 2018. *Big Data in the Arts and Humanities: Theory and Practice*. Boca Raton: Taylor & Francis.

Schneider Gerold. 2024. *Text Analytics for Corpus Linguistics and Digital Humanities*, Bloomsbury.

Shalin Hai-Jew (ed.). 2017. *Data Analytics in Digital Humanities*. Springer Cham. <https://doi.org/10.1007/978-3-319-54499-1>

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	xxxx
Contact details:	xxxx
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly projects: 40% Assignment (compulsory): 30% Final exam: 30%
Implementation Instructions: (3)	Written assessments and the final examination will be conducted through eClass on a date and time that will be announced, along with the duration and content, within a reasonable period before they take place. The assignment will be submitted via eClass on a specified date.

(37) Please write YES or NO

(38) 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.

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

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

<p><i>ICT Use</i></p> <p><i>Adaptation to new situations</i></p> <p><i>Decision making</i></p> <p><i>Autonomous work</i></p> <p><i>Teamwork</i></p> <p><i>Working in an international environment</i></p> <p><i>Working in an interdisciplinary environment</i></p> <p><i>Production of new research ideas</i></p>	<p><i>Respect for the natural environment</i></p> <p><i>Sustainability</i></p> <p><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></p> <p><i>Critical thinking</i></p> <p><i>Promoting free, creative and inductive reasoning</i></p>
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, • ICT Use • Autonomous work • Teamwork • Equity and Inclusion • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promoting free, creative and inductive reasoning • Working in an interdisciplinary environment • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Critical thinking 	

3. COURSE CONTENT

1	Introduction	<ul style="list-style-type: none"> ▪ Learning contract ▪ Literacy and Pedagogy of multiliteracies: principles and challenges
2	Language and Literacy	<ul style="list-style-type: none"> ▪ Dimensions and processes of language teaching in the context of literacy pedagogy
3	Academic discourses, academic literacy and scientific literacy	<ul style="list-style-type: none"> ▪ Academic discourses in education and society ▪ Academic literacy: linguistic, cognitive, socio-cultural and critical approaches ▪ The key concepts of scientific literacy ▪ Pluriliteracies across school subjects
4	Digital literacy	<ul style="list-style-type: none"> ▪ Concepts and definitions ▪ Relation to critical literacy and multiliteracies ▪ Common and different fields with information, computer, computational and technological literacy ▪ Correlations with school subjects ▪ Digital literacy and curricula
5	Cultural literacy	<ul style="list-style-type: none"> ▪ Concepts and definitions ▪ Connections with multicultural literacy / knowledge and appreciation of other cultures ▪ Contribution to the development of individual and social identities ▪ Linking cultural and literary literacy ▪ Cultural literacy and curricula
6	Literary literacy	<ul style="list-style-type: none"> ▪ Concepts and definitions ▪ Correlations with: <ul style="list-style-type: none"> -the teaching of literature and communities of readers -critical literacy and critical pedagogy -school subjects ▪ Literary literacy and curricula
7	AI Literacy	<ul style="list-style-type: none"> ▪ Definition
8	AI Literacy	<ul style="list-style-type: none"> ▪ Types of AI, applications, critical issues and ethics
9	Future literacy	<ul style="list-style-type: none"> ▪ Prediction and transformational skills
10	Historical literacy	<ul style="list-style-type: none"> ▪ Introduction ▪ Historical thinking and awareness

		<ul style="list-style-type: none"> ▪ Linguistic and visual representations of History
11	Historical literacy	<ul style="list-style-type: none"> ▪ Historical perspective, historical sources, historical empathy, concepts of historical time and space ▪ Collaborative activities on case studies
12	Historical literacy	<ul style="list-style-type: none"> ▪ Historical literacy at school (pedagogical and historiographical framework, epistemological foundation) ▪ Collaborative activities on curricula and textbooks (assignments)
13	Project presentations and recap	

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning • Flipped Classroom 																		
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<ul style="list-style-type: none"> • Use of ICT in teaching and communication with students • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Collaborative educational environments • Communication with students via email • ChatGPT/Claude/Gemini/Copilot/Googlebard 																		
<p>TEACHING ORGANIZATION <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th style="background-color: #e0e0e0;"><i>Activity</i></th> <th style="background-color: #e0e0e0;"><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Study and analysis of bibliography</td> <td>57</td> </tr> <tr> <td>Collaborative tasks within classroom</td> <td>20</td> </tr> <tr> <td>Project</td> <td>41</td> </tr> <tr> <td>Flipped Classroom</td> <td>15</td> </tr> <tr> <td>Simulations</td> <td>4</td> </tr> <tr> <td>Exams</td> <td>4</td> </tr> <tr> <td>Total</td> <td>180</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	39	Study and analysis of bibliography	57	Collaborative tasks within classroom	20	Project	41	Flipped Classroom	15	Simulations	4	Exams	4	Total	180
<i>Activity</i>	<i>Workload/semester</i>																		
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Exams	4																		
Total	180																		
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral</i></p>	<p>Formative</p> <p>Cooperative tasks (compulsory): 30%</p> <p>Project (compulsory): 50%</p> <p>Peer-assessment: 20%</p>																		

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

5. SUGGESTED BIBLIOGRAPHY

Foreign:

- Arslantas, T. K., & Gul, A. (2022). Digital literacy skills of university students with visual impairment: A mixed-methods analysis. *Education and Information Technologies*, 27(4), 5605–5625.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275-285.
- Hirsch, Jr, Kett, J.F. & Trefil, J. (2002). *The New Dictionary of Cultural Literacy*. Boston: Houghton Mifflin.
- Maine, F., V. Cook, & T. Lähdesmäki. 2019. Reconceptualizing Cultural Literacy as a Dialogic Practice. *London Review of Education* 17 (3): 382–391.
- Meier, C. et al. (2017). An Extended Model of Literary Literacy. In: Leutner, D., Fleischer, J., Grünkorn, J., Klieme, E. (eds) *Competence Assessment in Education. Methodology of Educational Measurement and Assessment*. Springer, Cham.
- Seixas, P., & Morton, T. (2013). *The Big Six Historical Thinking Concepts*. Nelson Education.
- Wineburg, S. (2001). *Historical Thinking and Other Unnatural Acts: Charting the Future of Teaching the Past*. Temple University Press.

Greek:

- Γαβρηλίδου, Ζ., Μητσιάκη, Μ., & Φλιάτουρας, Α. 2021. *100 βασικές ενότητες για τη γλωσσολογία*. Αθήνα: Gutenberg.
- Γαβρηλίδου, Ζ. (2024). *Διδάσκοντας και μαθαίνοντας γλώσσα με το ChatGPT*. Εκδ. Κριτική.
- Δημάση, Μ. & Αραβανή, Ευ. (2013). Η Παιδαγωγική των Πολυγραμματισμών στα σχολικά εγχειρίδια της Γλώσσας του Γυμνασίου: Ουτοπία ή Πραγματικότητα; *MAJESS*, 55-64.
- Kalantzis, M., Core. B., Αρβανίτη Ε., Στελλάκης, Ν. (2019). *Γραμματισμοί*. Εκδόσεις Κριτική.
- Καρατάσου, Κ.. (2016). Το πρίσμα και τα φίλτρα των ειδών. Η ειδολογία στην υπηρεσία του λογοτεχνικού γραμματισμού. *KEIMENA για την έρευνα, τη θεωρία, την κριτική και τη διδακτική της Παιδικής και Εφηβικής Λογοτεχνίας*.
- Μητσιάκη, Μ., & Λεύκος, Ι. (2023). Πολυγλωσσικοί γραμματισμοί στις Φυσικές Επιστήμες με τη χρήση του ΕΛεΦυΣ. *Περιοδικό Φιλολόγος*, τ. 188, 192-218.
- Παληκίδης, Α. (2019). «Διδάσκοντας ιστορία για μια δημοκρατική κοινωνία» στο Γ. Τσιγάρας, Ελ. Ναξίδου, Δ. Στρατηγόπουλος (επιμ.), *Ανδρί κόσμος*. Τιμητικός Τόμος στον Καθηγητή Κωνσταντίνο Κ. Χατζόπουλο, Θεσσαλονίκη 2019, 507-523.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	M. MITSIAKI
Contact details:	mmitsiaki@helit.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Cooperative tasks (compulsory): 30% Project: 50% Peer-assessment: 20%
Implementation Instructions: (3)	All types of assessment will be conducted via the eClass platform.

(40) Please write YES or NO

(41) 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.

(42) 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.

COURSE OUTLINE
RESEARCH METHODOLOGY I

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	3 RD
COURSE TITLE	RESEARCH METHODOLOGY I		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>										
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Understand the fundamental epistemological foundations of scientific research. • Comprehend the basic logic underlying a research plan. • Develop a basic research plan. • Grasp the research rationale, design, objectives, findings, and conclusions of a scientific paper. • Learn how to search for, locate, and evaluate credible and reliable scientific sources using electronic databases, libraries, and academic platforms. • Know the correct format for citing references according to APA and MLA standards. • Identify the main structural components of a research article (e.g., problem, methodology, results, conclusions) and understand and summarize its key ideas. • Understand the basic epistemological and ethical principles of research. • Organize and comprehend a quantitative data research project. • Be introduced to the fundamental principles of statistical science. 										
<p>General Skills <i>Name the desirable general skills upon successful completion of the module</i></p> <table> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td></td> <td><i>Demonstration of social, professional and moral</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>		<i>Demonstration of social, professional and moral</i>
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>									
<i>ICT Use</i>	<i>Equity and Inclusion</i>									
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>									
<i>Decision making</i>	<i>Sustainability</i>									
	<i>Demonstration of social, professional and moral</i>									

<i>Autonomous work</i>	<i>responsibility and sensitivity to gender issues</i>
<i>Teamwork</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	

<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, ICT Use • Adaptation to new situations • Decision making • Autonomous work • Teamwork • Production of new research ideas • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Critical thinking • Promoting free, creative and inductive reasoning

3. COURSE CONTENT

<ol style="list-style-type: none"> 1. Research Methodology: Key Epistemological Foundations 2. Concept and Content of Scientific Research 3. The Research Cycle: From Inquiry to Conclusions 4. Literature Review and Evaluation of Scientific Sources: Citing References in APA and MLA Formats 5. Structure of Research Articles: Understanding and Identifying Key Points 6. Analysis of Research Articles: Strategic Information Search 7. Epistemology of Quantitative Research Methods: Historical Background and Contemporary Trends 8. Data Collection Methods 9. Populations and Samples: Sampling Methods 10. Types of Data: Data Analysis 11. Questionnaires as a Data Collection Method 12. Introduction to Statistical Analysis: Basic Principles and Types of Analysis 13. Questionnaire Preparation and Implementation: Statistical Analysis of Questionnaires and Formulating Conclusions
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4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	Face-to-Face Interaction	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in Teaching and Communication with Students <ul style="list-style-type: none"> • Digital Slides • Videos • MsTeams/eClass, Webmail 	
TEACHING ORGANIZATION <i>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.</i>	Activity	Workload/semester
	Lectures	39
	Tutorial Exercises	46
	Study and Analysis of Literature	90
	Exams	5
	Total	180

<p>Etc.</p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	
<p>STUDENT EVALUATION</p> <p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative</p> <p>Mid-term written examination: 30%</p> <p>Final written examination: 70%</p>

5. SUGGESTED BIBLIOGRAPHY

Foreign:

1. Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
2. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Greek:

1. Bryman, A. (2017). *Μέθοδοι κοινωνικής έρευνας* (Α. Αϊδίνης, επιμ.). Εκδόσεις Gutenberg.
2. Gay, L. R., Mills, G. E., & Airasian, P. (2017). *Εκπαιδευτική έρευνα* (1η ελληνική έκδοση από την 10η αμερικάνικη). Εκδόσεις Προπομπός.
3. Τσέλιου Ε., Αβραμίδης, Η. και Ζαφείρης, Κ. (2023). (επιστημονική επιμέλεια). McCartan K. and Robson C. Η έρευνα του πραγματικού κόσμου. Ένα εγχειρίδιο μεθόδων κοινωνικής έρευνας σε εφαρμοσμένα πλαίσια. Μετ. Αυγήτα Ε., Gutenberg, ISBN 9789600124781.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	K. ZAFEIRIS
Contact details:	kzafiris@he.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Mid-term written examination: 30% Final written examination: 70%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(43) Please write YES or NO

(44) 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.

(45) 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.

4TH SEMESTER

Ψ COURSE OUTLINE

MUSEUMS, COLLECTION MANAGEMENT, AND EXHIBITION DESIGN

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	4 TH
COURSE TITLE	MUSEUMS, COLLECTION MANAGEMENT, AND EXHIBITION DESIGN		
TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
<p><i>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.</i></p>			
		3	6
<p><i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i></p>			
COURSE TYPE	BACKGROUND		
<p><i>Background, General Knowledge, Scientific Area, Skill Development</i></p>			
PREREQUISITES:	NO		
TEACHING & EXAMINATION LANGUAGE:	GREEK		
COURSE OFFERED TO ERASMUS STUDENTS:	YES		
COURSE URL:	https://eclass.duth.gr/courses/XXXXXX/		

2. LEARNING OUTCOMES

<p>Learning Outcomes</p> <p><i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i></p>										
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • understand the theoretical and ideological tendencies in the context of which the institution of museums was developed • describe the concept of museum collection management • recognise the importance of a museum's collection policy • know how to document objects according to international standards • describe the concept of museum research • know the representational function and interpretive approach of the exhibitions • analyse issues of exhibition narrative • recognise the different phases of museum practice (collection, museological planning, museographic application, communication) 										
<p>General Skills</p> <p><i>Name the desirable general skills upon successful completion of the module</i></p> <table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td></td> <td><i>Demonstration of social, professional and moral</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>		<i>Demonstration of social, professional and moral</i>
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>									
<i>ICT Use</i>	<i>Equity and Inclusion</i>									
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>									
<i>Decision making</i>	<i>Sustainability</i>									
	<i>Demonstration of social, professional and moral</i>									

<i>Autonomous work</i>	<i>responsibility and sensitivity to gender issues</i>
<i>Teamwork</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, ICT Use • Autonomous work • Teamwork • Project design and management • Promoting free, creative and inductive reasoning 	

3. COURSE CONTENT

1	Introduction to the theoretical tendencies and the historical development of the creation of museums and museum collections
2	Theories of material culture or else “we and things”. From anthropology to museum negotiations
3	The multiple negotiations of oral history in museums and the management of memory. Difficult memories and Holocaust museums
4	Tangible and intangible heritage inside and outside museums
5	Issues relating to the management of museum collections
6	Museum documentation and its basic principles
7	Museums, means of interpretation and communication with the public. From theory to practice
8	From collecting to exhibition practice. Representational museum strategies and represented communities
9	Exhibition organization and curation: conceptual processing, design rendering
10	Social, cultural, institutional and organisational context of museum exhibitions
11	National art and the invention of museums
12	Museum histories between modernity and modernism: Art history, ideologies and readings of history
13	Museum visit

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Collaborative learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 	
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive</i>	Activity	Workload/semester
	Lectures	39
	Essay	69
	Study and analysis of bibliography	69
	Exams	3
Total	180	

<p><i>learning, Study visits, Study / creation, project, creation, project. Etc.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	
<p>STUDENT EVALUATION</p> <p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative</p> <p>Essay (compulsory): 50%</p> <p>Final written examination: 50%</p>

5. SUGGESTED BIBLIOGRAPHY

<ol style="list-style-type: none"> 1. Bishop Claire, <i>Radical Museology or, What's 'Contemporary' in Museums of Contemporary Art?</i> London: Koenig Books, 2013 2. Ferguson Bruce W., Greenberg Reesa, Nairne Sandy (eds), <i>Thinking About Exhibitions</i>, London: Routledge, 1996 3. Obrist Hans Ulrich and April Elizabeth Lamm, <i>Everything You Always Wanted to Know About Curating But Were Afraid to Ask</i>, 2011. 4. Obrist Hans Ulrich, <i>A brief history of curating</i>, 2008. 5. Νάκου Ε., <i>Μουσεία, ιστορίες και Ιστορία</i>, εκδ. Νήσος, Αθήνα 2009. 6. Νικηφορίδου Α. «Άνθρωποι και εργαλεία. Η ερμηνευτική προσέγγιση της νέας έκθεσης του Μουσείου Ελληνικής Λαϊκής Τέχνης», <i>Τετράδια Μουσειολογίας</i> 2, 2005. 7. Σολομών Ε., «Μουσεία και προφορικές μαρτυρίες: ενδυναμώνοντας μνήμες και σχέσεις» στο Μπούσχοτεν Ρ., Βερβενιώτη Τ., Μπάδα Κ., Νάκου Ε., Πανταζής Π., Χατζαρούλα Π.(επιμ.), <i>Γεφυρώνοντας τις γενιές: διεπιστημονικότητα και αφηγήσεις ζωής στον 21^ο αιώνα, Προφορική ιστορία και άλλες βιο-ιστορίες</i>, Πρακτικά διεθνούς συνεδρίου, Ένωση προφορικής ιστορίας, Βόλος 2013. 8. Σολομών Ε., «Τα μουσεία ως 'αντικείμενα'. Αναζητώντας τρόπους προσέγγισης», στο Γιαλούρη Ε., <i>Υλικός Πολιτισμός. Η ανθρωπολογία στη χώρα των πραγμάτων</i>, εκδ. Αλεξάνδρεια, Αθήνα, 2012. 9. Χατζηνικολάου Τ., «Μνήμη και ανάμνηση. Για μια νέα προσέγγιση των μουσειακών συλλογών» στο Νάκου Ε. & Γκαζή Α., <i>Η Προφορική Ιστορία στα μουσεία και στην εκπαίδευση</i>, εκδ. Νήσος, Αθήνα, 2015.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	A. MACHA
Contact details:	amacha@he.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Essay (compulsory): 50% Final written examination: 50%
Implementation Instructions: (3)	The final written exam 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.

(46) Please write YES or NO

(47) 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.

(48) 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.

COURSE OUTLINE

DIGITIZATION OF CULTURAL CONTENT: TECHNOLOGIES AND PRACTICAL APPLICATIONS (DIGITAL TOOLS)

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	4 TH
COURSE TITLE	DIGITIZATION OF CULTURAL CONTENT: TECHNOLOGIES AND PRACTICAL APPLICATIONS (DIGITAL TOOLS)		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
PREREQUISITES:	NO		
TEACHING & EXAMINATION LANGUAGE:	GREEK		
COURSE OFFERED TO ERASMUS STUDENTS:	NO		
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.

After the successful completion of the course, students will be able to:

- understand the technical specifications and protocols for the digitization of various types of cultural content, such as texts, images, objects, and audio files, as well as methods for 2D and 3D digitization.
- comprehend the principles of digital design and the presentation of digital collections, using digital tools to organize and showcase cultural artifacts.
- address issues related to copyright and the protection of digitized content, including the legal frameworks for open access and the use of licenses.
- recognize the importance of digitization for the preservation and safeguarding of cultural heritage, emphasizing modern techniques for the conservation of digital data.
- being knowledgeable and equipped with skills in digital data management, including storage, management, and retrieval of digital content.
- understand advanced methods of digital preservation and applications to ensure long-term accessibility and maintenance of cultural content.
- select the appropriate digitization method according to the type and nature of the cultural artifact, as well as the project needs.
- know the standards and practices for interoperability and sharing of digital content across multiple platforms, enhancing collaboration among cultural organizations.
- develop educational digital archives using modern digital tools to support educational purposes

<p>and interactive experiences.</p> <ul style="list-style-type: none"> utilize technology to develop collaborative and interactive projects that combine cultural applications with educational practices. organize and manage digitization projects for cultural content, developing skills in design, planning, and workflow management. appreciate the significance of multidimensional use of digital cultural content in both educational environments and for the broader preservation of cultural heritage. develop collaborative skills through group work, taking on the design, implementation, and presentation of digitization projects for cultural content. 																			
<p>General Skills</p> <p><i>Name the desirable general skills upon successful completion of the module</i></p> <table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> <tr> <td><i>Production of new research ideas</i></td> <td></td> </tr> </table>		<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>		<i>Production of new research ideas</i>	
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<i>Production of new research ideas</i>																			
<ul style="list-style-type: none"> Search, analysis and synthesis of data and information, using the appropriate technologies Adaptation to new situations Decision making Individual work Teamwork Working in an interdisciplinary environment Respect for diversity and multiculturalism Demonstration of social, professional and moral responsibility and sensitivity to gender issues Promotion of free, creative, and inductive thinking 																			

3. COURSE CONTENT

1	<p>Introduction to Digitization of Cultural Content</p> <p>Definition, goals, and significance of digitization. Historical development and applications in cultural industries. Examples of digitization projects for cultural content. Workshop: Overview of digitization tools.</p>
2	<p>Technological Advances in Digitization</p> <p>From the analog to the digital world. Review of digitization technologies (photogrammetry, 3D scanning, OCR). Software and tools for processing cultural content. Workshop: Using OCR and basic processing tools.</p>
3	<p>Digitization of Images, Texts, Audio, and Audiovisual Archives</p> <p>Methods and techniques for various types of cultural content. Challenges based on material (texts, artworks, archaeological finds). Analysis of digitization quality. Workshop: Hands-on practice with digitizing images and texts.</p>
4	<p>Advanced Digitization Methods</p> <p>Advanced methods such as [H]-RTI, MSI, XRF, XPCT. Workshop: Application of advanced methods to cultural content.</p>
5	<p>Development of Digital Archives for Educational Purposes</p> <p>Introduction to creating educational digital resources.</p>

	Teaching methods through digital collections. Workshop: Design and organization of an educational digital archive.
6	Interoperability and Sharing of Digital Content Standards and techniques for interoperability. Sharing cultural content across multiple platforms. Workshop: Using data sharing systems and linking with other networks.
7	Copyright and Digitized Cultural Content Legal framework for the protection of digital cultural content. Licensing issues and management of copyright. Open access and usage models for digital collections. Workshop: Designing a digital collection with a focus on copyright.
8	Management of Digital Cultural Collections Platforms and software for managing cultural collections (CMS, DAM). Organizing and presenting digital files in online environments. Workshop: Creating a digital collection using CMS/DAM.
9	Advanced Methods of Digital Preservation Maintaining the authenticity and integrity of digital files. Advanced techniques for the preservation and storage of digital data. Workshop: Applying preservation techniques to digital files.
10	Preservation and Maintenance of Digital Cultural Archives Long-term preservation of digital data. Backup, storage, and archiving technologies. Workshop: Settings and applications for file storage.
11	Analysis and Search of Digital Data Techniques for storing and searching digital data. Metadata and semantic search. Workshop: Using metadata tools for efficient searching.
12	Organizing Digitization Projects Managing the workflow of digitization. Planning and organizing strategies. Workshop: Creating a plan for a digitization project.
13	Collaboration and Teamwork in Digitization Developing collaborative skills for team-based digitization design. Preparation and presentation of team projects. Workshop: Teamwork and presentation of the digitization project.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Face-to-face/Lectures • Differentiated instruction • Online communication for guidance and feedback during lesson plan development • Laboratory teaching/applications
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in – teaching – laboratory training – communication with students
TEACHING ORGANIZATION <i>The ways and methods of teaching</i>	Activity
	Workload/semester
	Lectures
	26

<p>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.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</p>	Workshops	13
	Final project	37
	Weekly projects / Quizzes	46
	Independent study	55
	Final Examinations	3
	Total	180
<p>STUDENT EVALUATION</p> <p>Description of the evaluation process</p> <p>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</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Formative Assessment</p> <p>Weekly Projects: 40%</p> <p>Assignment (mandatory): 30%</p> <p>Final Examinations: 30%</p>	

5. SUGGESTED BIBLIOGRAPHY

1. Bantin, P. C. (2016). *Building trustworthy digital repositories: theory and implementation*. Rowman & Littlefield.
2. Simons, N., & Richardson, J. (2013). *New content in digital repositories: The changing research landscape*. Elsevier.
3. Καπιδάκης, Σ. (2014). *Εισαγωγή στις Ψηφιακές Βιβλιοθήκες* (2η έκδοση). Εκδόσεις Δίσιγμα.
4. Κουτσούδης, Α., Παυλίδης, Γ. (2019). *3Δ ψηφιοποίηση, 2^η έκδοση*. Εκδόσεις Τσότρας.
5. Κυριάκη-Μάνεση, Δ., & Κουλούρης, Α. (2015). *Διαχείριση ψηφιακού περιεχομένου* [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις.
<https://dx.doi.org/10.57713/kallipos-771>
6. ΕΚΤ (2020), *Καλές Πρακτικές και Προδιαγραφές διαλειτουργικότητας και ποιότητας για τη διαδικτυακή διάθεση ψηφιακού πολιτιστικού περιεχομένου*. Αθήνα: Εθνικό Κέντρο Τεκμηρίωσης και Ηλεκτρονικού Περιεχομένου.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXXXX
Contact details:	XXXXXX
Supervisors: (1)	YES
Evaluation methods: (2)	Lesson plans: 40% Final examinations: 60%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(49) Please write YES or NO

(50) 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.

(51) 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.

COURSE OUTLINE

INTRODUCTION TO MACHINE LEARNING

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	4 TH
COURSE TITLE	INTRODUCTION TO MACHINE LEARNING		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Understand, describe, and interpret key terms related to machine learning. • Identify the basic problems that can be solved through machine learning techniques, such as classification, regression and clustering. • Apply appropriate machine learning algorithms to address specific problems. • Process data using computational techniques to prepare a dataset. • Evaluate machine learning model accuracy. • Utilize tools and libraries to implement machine learning models (e.g., Scikit-learn, TensorFlow, Keras). 																
<p>General Skills <i>Name the desirable general skills upon successful completion of the module</i></p> <table> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>	
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<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>															
<i>Working in an interdisciplinary environment</i>																

Production of new research ideas

- Critical thinking and problem solving
- Analytical ability to understand and evaluate machine learning algorithms
- Teamwork
- Programming skills to develop and implement machine learning algorithms
- Data manipulation and understanding of the processes involved in data preprocessing

3. COURSE CONTENT

1	Introduction to Machine Learning	<ul style="list-style-type: none"> • Familiarization with the students and presentation of the course objectives, expected learning outcomes, and requirements • Introduction to Machine Learning and its applications • Basic categories: supervised, unsupervised and reinforcement
2	Data processing	<ul style="list-style-type: none"> • Data cleaning techniques and handling missing data and noise.
3	Linear models for classification and regression	<ul style="list-style-type: none"> • Linear regression: Theory and applications • Logistic regression: Introduction and classification applications • Training and evaluating linear models
4	Nonlinear models and polynomial regression	<ul style="list-style-type: none"> • Polynomial regression and higher order models • Model Complexity & Overtraining
5	Support Vector Machines (SVM)	<ul style="list-style-type: none"> • Theory and principles of SVM • Linear and Nonlinear SVM Classification • Hyper parameter tuning
6	Decision Trees and Ensemble Methods	<ul style="list-style-type: none"> • Decision Trees: Theory, advantages and disadvantages • Additive models: Random Forests, Bagging, Boosting • Application and model optimization
7	Clustering algorithms and unsupervised learning	<ul style="list-style-type: none"> • K-means and hierarchical clustering • Advantages and restrictions of unsupervised learning • Examples of clustering applications
8	Principles of Neural Networks	<ul style="list-style-type: none"> • Introduction to artificial neural networks • Structure and training of neural networks
9	Deep Learning and Convolutional Neural Network (CNNs)	<ul style="list-style-type: none"> • Deep Learning Networks: Introduction • Introduction to Convolutional Neural Network and applications to image processing • Training and Fine-Tuning CNNs
10	Reinforcement Learning models	<ul style="list-style-type: none"> • Introduction to Reinforcement Learning • Environments, policies and rewards • Reinforcement Learning for independent systems
11	Evaluation and Optimization for Machine Learning models	<ul style="list-style-type: none"> • Model Performance Metrics: Accuracy, Precision, Recall, F1-score, ROC. • Split for datasets: Train, Validation, Test • Model optimization techniques: Cross-validation, Gridsearch.
12	Tools and libraries for Machine Learning	<ul style="list-style-type: none"> • Introduction to Scikit-learn, TensorFlow, Keras and PyTorch. • Hands-on application of algorithms through libraries. • Using Google Colab and other tools for practical model development.
13	Recap	<ul style="list-style-type: none"> • Recap and resolving questions • Student feedback

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning
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<i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Collaborative learning 																
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)</p> <p><i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<p>Use of ICT in teaching and communication with students</p> <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 																
<p>TEACHING ORGANIZATION</p> <p><i>The ways and methods of teaching are described in detail.</i></p> <p><i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1" data-bbox="683 472 1340 819"> <thead> <tr> <th><i>Activity</i></th> <th><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Laboratory Exercise</td> <td>13</td> </tr> <tr> <td>Essay</td> <td>37</td> </tr> <tr> <td>Weekly projects/tasks</td> <td>46</td> </tr> <tr> <td>Study and analysis of bibliography</td> <td>55</td> </tr> <tr> <td>Written examination</td> <td>3</td> </tr> <tr> <td>Total</td> <td>180</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	26	Laboratory Exercise	13	Essay	37	Weekly projects/tasks	46	Study and analysis of bibliography	55	Written examination	3	Total	180
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<p>STUDENT EVALUATION</p> <p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative</p> <p>Mid-term written examination: 20%</p> <p>Final written examination: 80%</p> <p>Oral examination upon student's request.</p>																

5. SUGGESTED BIBLIOGRAPHY

<ul style="list-style-type: none"> • Greek: <ol style="list-style-type: none"> 1. Μπότσης Δ, Διαμαντάρας Κ (2019) Μηχανική μάθηση 2. Haykin S (2010) Νευρωνικά Δίκτυα & Μηχανική Μάθηση, 3η Έκδοση • Foreign: <ol style="list-style-type: none"> 1. Andreas C. Müller & Sarah Guido (2016) Introduction to Machine Learning with Python: A Guide for Data Scientists 2. AurélienGéron (2022) Hands-On Machine Learning with Scikit-Learn, Keras&TensorFlow (3rd Edition).

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXXXXXX
Contact details:	XXXXXXXX
Supervisors:	YES
Evaluation methods:	Mid-term written examination: 30% Final written examination: 70%
Implementation Instructions:	<p>Mid-term written examination (30%): The purpose of the progress report is to assess student performance halfway through the semester, allowing for evaluation of their progress in the machine learning course. The report will be submitted through eClass on a specified date, which will be announced to students during the initial lectures. The evaluation considers students' overall attendance, participation, and performance in the course.</p> <p>Final written examination (70%): The final written examination assesses understanding of the fundamental theories, concepts, and principles of the course. The exam will be conducted in person on a date and time announced in advance, along with the duration and content of the exam.</p>

COURSE OUTLINE

PEDAGOGY, LEARNING AND TEACHING

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	4 TH
COURSE TITLE	PEDAGOGY, LEARNING AND TEACHING		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Acquire the necessary cognitive and methodological background that will enable them to: <ul style="list-style-type: none"> • Use basic terminology in Pedagogy • Become familiar with the themes of Pedagogy, its research methods, and identify its scope and development trajectory • Recognize the importance and contribution of Pedagogy, allowing them to progress smoothly in their pedagogical training. • Develop critical thinking and pedagogical reflection through their engagement with educational movements, contemporary trends, inquiries, and forms of education within the educational field. • Analyze the levels of approach to pedagogical phenomena, evaluate the factors influencing them, and thus form a clear understanding of the educational environment and its conditions. • Develop knowledge, skills, and attitudes related to: <ul style="list-style-type: none"> ○ The phenomenon of learning ○ The implications and applications of learning theories in teaching practice ○ The concept of methodology, which provides opportunities to select alternative solutions for actions toward achieving teaching goals and objectives ○ Evaluation ○ The concepts of curriculum, syllabus, teaching, and textbooks

<p>The student will be able to:</p> <ul style="list-style-type: none"> • Design and conduct a lesson, recognizing the importance of active student participation in the process, engage in self-assessment, and utilize relevant feedback effectively. 																			
<p>General Skills</p> <p><i>Name the desirable general skills upon successful completion of the module</i></p> <table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> <tr> <td><i>Production of new research ideas</i></td> <td></td> </tr> </table>		<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>		<i>Production of new research ideas</i>	
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<i>Production of new research ideas</i>																			
<ul style="list-style-type: none"> • Research, analysis, and synthesis of data and information, utilizing the necessary technologies • Independent work • Teamwork • Respect for diversity and multiculturalism • Demonstration of social, professional, and ethical responsibility and sensitivity to gender issues • Adaptation to new situations • Decision-making • Independent work • Work in an interdisciplinary environment • Generation of new research ideas • Project planning and management • Exercise of critical thinking and self-criticism • Promotion of free, creative, and inductive thinking 																			

3. COURSE CONTENT

1. Clarification of basic pedagogical concepts. Goals, means, and factors of education. Pedagogy as a Science (subject matter, utility, scientific foundation). Research in Pedagogical Science. From Pedagogy to the Educational Sciences. Branches and contemporary trends in the Educational Sciences.
2. Overview of the major pedagogical and educational movements from the 18th century to the mid-20th century. Educational and pedagogical movements in the second half of the 20th century: presentation and critical analysis. Differentiated Pedagogy.
3. Aspects and conditions of education: Aims and objectives, the school institution, educational institution, programs and content, methods and techniques, evaluation, school space and time, the relationship between school, family, and society. The role of schools and educators in the modern era.
4. Pedagogical Science and Learning. The Educational Process: Fundamental principles, educational relationships, the lesson, textbooks. Categories of textbooks. Evaluation of school textbooks. The relationship between the textbook, the curriculum, and teaching.
5. The role of Teaching Methodology within the educational sciences. Basic concepts and contents of Didactics: Teaching, Learning, Curriculum, and related concepts (class schedule, curriculum, syllabus). Organization and evaluation of the curriculum. The curriculum and teaching practice. The concept of the "Hidden Curriculum."
6. The phenomenon of learning, as presented by different schools and their representatives, such as Behaviorism, Cognitivism, Gestalt, Humanistic, Constructivist approaches, and others.

- 7.Applications of learning theories in teaching practice. The role of individual learning factors (e.g., perception, motivation, multiple intelligences, gender, interests, etc.) and, more broadly, the learning profile of students in school processes.
- 8.Teaching approaches based on dominant cognitive processes, methods, forms of instruction, group-based learning, and project-based learning/action planning.
- 9.Differentiated instruction.
- 10.Evaluation and self-evaluation. Practice in teaching evaluation. Assessment of teaching plans and scenarios.
- 11.Development of a "Teaching Plan" or "Teaching Scenario" for a specific instructional unit, either on an hourly or broader basis.
- 12.Presentation of student projects.
- 13.Reflection.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 	
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i>	Activity	Workload/semester
	Lectures	39
	Essay	75
	Project Presentation	10
	Study and analysis of bibliography	52
	Written examination	4
	Total	180
STUDENT EVALUATION <i>Description of the evaluation process</i> <i>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</i>	Formative Mid-term written examination: 15% Essay (compulsory): 30% Final written examination: 55%	

examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

5. SUGGESTED BIBLIOGRAPHY

Greek-language bibliography:

- Βρεττός, Ι. (2005). Θεωρίες της Αγωγής τόμος Α. Αθήνα: Gutenberg.
- Βρεττός Ι.Ε. – Καψάλης Α.Γ., Αναλυτικά Προγράμματα, Art of Text, Θεσσαλονίκη 1994
- Δαναοσσή –Αφεντάκη, Α.(1993). Εισαγωγή στην Παιδαγωγική :τ. Β' Η Εξέλιξη της Παιδαγωγικής και Διδακτικής Σκέψης. Αθήνα.
- Θεοφιλίδης Χ., Διαθεματική Προσέγγιση της Διδασκαλίας, Εκδόσεις Γρηγόρη, Αθήνα 2002.
- Κανάκης Ι.Ν., Η Οργάνωση της Διδασκαλίας-Μάθησης με Ομάδες Εργασίας, Τυπωθήτω – Γιώργος Δαρδανός, Αθήνα 2001.
- Κασσωτάκης Μ.Ι. – Φλουρής Γ., Μάθηση και διδασκαλία. Θεωρία, Πράξη και Αξιολόγηση της Διδασκαλίας, τ. Β', Αθήνα 2005.
- Κορρέ Ει., Θέματα Διδακτικής Μεθοδολογίας. Αναλυτικό Πρόγραμμα, Διδασκαλία, Σχολικά Εγχειρίδια, Εκδόσεις Γρηγόρη, Αθήνα 2010.
- Κορρέ, Ει.(2021). Διαφοροποιημένη Παιδαγωγική. Από τη Θεωρία έως τη Διδασκαλία. Αθήνα: Άλκιμο.
- Κουτσελίνη-Ιωαννίδου Μ., Θεωρητικό πλαίσιο για την αξιολόγηση των διδακτικών εγχειριδίων, Νέα Παιδεία, τ. 79, Αθήνα 1996, 70-77.
- Λιαντίνης Δ., Διδακτική, Αθήνα 1990.
- Μαρκαντώνης Ι.Σ., Ανθρωπαγωγική, Τόμος 2, Παιδαγωγική, Ψυχολογία και Διδακτική, Αθήνα 1990.
- Μαρμαρινός Ι.Γ., Το Σχολικό Πρόγραμμα, Αθήνα 1992.
- Ματσαγγούρας Η.Γ., Ομαδοσυνεργατική Διδασκαλία και Μάθηση, Εκδόσεις Γρηγόρη, Αθήνα 2008.
- Ματσαγγούρας Η.Γ., Θεωρία και πράξη της Διδασκαλίας, τ. Β', Στρατηγικές Διδασκαλίας, Η Κριτική σκέψη στη Διδακτική Πράξη, Gutenberg, Αθήνα 19994.
- Ξωχέλλης, Π. (2003). Εισαγωγή στην παιδαγωγική. Θεσσαλονίκη: Αφοί Κυριακίδη.
- Χατζηδήμου Δ.(2009).Εισαγωγή στην Παιδαγωγική, Θεσ/νίκη: Αφοί Κυριακίδη.

Foreign-language bibliography.

- Anderson, K.M. (2007). Tips for Teaching: Differentiating instruction to include all students. Preventing School Failure 51(3): 49-54.
- Armstrong, T. (1994). Multiple intelligences: Seven ways to approach curriculum .Educational Leadership 52(3): 26-28.
- Bruner, J. (1966). Toward a theory of instruction. Cambridge: Harvard University Press
- Dunn, R. & Dunn, K. (1993). Teaching secondary students through their individual learning styles: Practical approaches for grades 7-12. Boston: Allyn & Bacon.
- Jarvis, P. (2006). The theory and practice of teaching (2nd ed). London & New:Routledge.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	I. KORRE
Contact details:	ikorre@helit.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Mid-term written examination: 15% Essay (compulsory): 30% Final written examination: 55%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(52) Please write YES or NO

(53) 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.

(54) 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.

COURSE OUTLINE
RESEARCH METHODOLOGY II

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	4 TH
COURSE TITLE	RESEARCH METHODOLOGY II		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	6	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	BACKGROUND		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Understand that scientific activity is based on research strategies • Be familiar with interdisciplinary analysis and evaluation of historical sources • Utilize and combine the methodological tools of history and social research • Be knowledgeable about the main qualitative and quantitative research methods in the social sciences • Design and evaluate a social research project using the above methods (individually or in combination). 																
<p>General Skills <i>Name the desirable general skills upon successful completion of the module</i></p> <table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>	
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>															
<i>ICT Use</i>	<i>Equity and Inclusion</i>															
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>															
<i>Decision making</i>	<i>Sustainability</i>															
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>															
<i>Teamwork</i>	<i>Critical thinking</i>															
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>															
<i>Working in an interdisciplinary environment</i>																

Production of new research ideas

- Search, analysis and synthesis of data and information, ICT Use
- Adaptation to new situations
- Teamwork
- Promoting free, creative and inductive reasoning Equity and Inclusion
- Working in an interdisciplinary environment
- Production of new research ideas

3. COURSE CONTENT

1. Topics on Historical and Comparative Philology
2. Textual Tradition and Criticism
3. Philological Interpretation and Literary Analysis
4. Historical Periodization: An Instrumental Approach
5. Methodologies of Historical Science: Research in Political History
6. The Field of Social History: Case Analysis
7. Theories, Methods, and Sources for Approaching Culture and Ideology
8. Examples
9. The Constructivist Paradigm - Ethnography
10. Project Method – Case Study
11. Interview and Participant Observation
12. Grounded Theory and Mixed Methods Research
13. Examples

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 	
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i>	Activity	Workload/semester
	Lectures	39
	Exercise	45
	Independent Study and Exam Preparation	92
	Final Examination	4
	Total	180
STUDENT EVALUATION <i>Description of the evaluation process</i>	Written Exam with Essay Questions Qualitative Methods: Written Exam with Essay Questions	

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

5. SUGGESTED BIBLIOGRAPHY

Textbooks:

1. Ελπίδα Κ. Βόγλη, *Τα πεδία της ιστορίας στο παρελθόν και το παρόν της*, εκδ. Πεδίο, Αθήνα 2023.
2. Patricia Leavy, *Σχεδιασμός κοινωνικής έρευνας*, University Studio Press, Θεσσαλονίκη 2021, μτφρ. Άλκηστις Δαλκαβούκη, επιμέλεια Βασίλης Δαλκαβούκης - Κυριάκος Σγουρόπουλος.

Additional Recommended Bibliography:

1. Ιστορικές σχολές και μέθοδοι. Εισαγωγή στην ευρωπαϊκή ιστοριογραφία, Έκδοση: 1η έκδ./2011 Συγγραφέας: Αρώτη-Τσίχλη, Καίτη ISBN: 978-960-02-2265-4 Τύπος: Σύγγραμμα Διαθέτης (Εκδότης): Παπαζήσης.
2. Η ιστορία σε ψίχουλα. Από τα Annales στη 'Νέα Ιστορία', Κωδικός στον Εύδοξο: 1103, Έκδοση: 11η έκδ./2010 Συγγραφέας: Dosse, Francois, μεταφραστής: Αγγελική Βλαχοπούλου, ISBN: 978-960-7309-48-8 Τύπος: Σύγγραμμα Διαθέτης (Εκδότης): Πανεπιστημιακές Εκδόσεις Κρήτης
3. Για την ιστορία, Έκδοση: 1η έκδ./1998 Συγγραφέας: Hobsbawm, Eric, μεταφραστής: Παρασκευάς Ματάλας, ISBN: 978-960-310-244-1 Τύπος: Σύγγραμμα Διαθέτης (Εκδότης): Θεμέλιο
4. Συνάρθρωση ποσοτικών και ποιοτικών προσεγγίσεων, Κωδικός Βιβλίου στον Εύδοξο: 57973, Έκδοση: 1η έκδ./2011 Συγγραφείς: Σαραφίδου Γιασεμή ISBN: 978-960-01-1403-4 Τύπος: Σύγγραμμα Διαθέτης (Εκδότης): Γ. ΔΑΡΔΑΝΟΣ - Κ. ΔΑΡΔΑΝΟΣ Ο.Ε.
5. Η έρευνα του πραγματικού κόσμου, Κωδικός Βιβλίου στον Εύδοξο: 31515, Έκδοση: 2η έκδ. συμπληρωμένη/2010 Συγγραφείς: Robson Colin ISBN: 978-960-01-1132-3 Τύπος: Σύγγραμμα Διαθέτης (Εκδότης): Γ. ΔΑΡΔΑΝΟΣ - Κ. ΔΑΡΔΑΝΟΣ Ο.Ε.
6. Η μεθοδολογία της επιστημονικής έρευνας στις ανθρωπιστικές επιστήμες. 2^η έκδοση αναθεωρημένη, με προσθήκες και διορθώσεις, Θ. Γ. Παππάς, Αθήνα, Εκδ. Καρδαμίτσα, 2016

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	I. DELIGIANNIS
Contact details:	inteligi@helit.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Written Exam with Essay Questions Qualitative Methods: Written Exam with Essay Questions
Implementation Instructions: (3)	The written exams will be conducted via the eClass platform on a date and time that will be announced in advance.

(55) Please write YES or NO

(56) 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.

(57) 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.

5TH SEMESTER

COURSE OUTLINE

ARTIFICIAL INTELLIGENCE AND APPLICATIONS 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	5 TH
COURSE TITLE	ARTIFICIAL INTELLIGENCE AND APPLICATIONS IN CULTURE		
TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
<p><i>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.</i></p>			
		3	5
<p><i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i></p>			
COURSE TYPE	SCIENTIFIC AREA		
<p><i>Background, General Knowledge, Scientific Area, Skill Development</i></p>			
PREREQUISITES:	NO		
TEACHING & EXAMINATION LANGUAGE:	GREEK		
COURSE OFFERED TO ERASMUS STUDENTS:	YES		
COURSE URL:	https://eclass.duth.gr/courses/XXXXXX/		

2. LEARNING OUTCOMES

<p>Learning Outcomes</p> <p><i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i></p>
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Define and explain the fundamental principles of AI, outline its historical development, and identify its main applications within the cultural sector. • Analyse cultural research problems and apply algorithms to develop effective solutions. • Select appropriate methodologies for addressing specific challenges in cultural research. • Understand semantic networks, ontologies, and rule-based systems and their role in managing cultural information. • Utilize expert systems and agent systems for analysing and processing cultural heritage data. • Comprehend the functioning of machine learning models (supervised, unsupervised, and reinforcement learning) and recognize their applications in cultural heritage conservation. • Apply artificial neural networks and deep learning methods to address complex cultural challenges. • Explore the use of AI in digitization, restoration, and predictive conservation to protect and enhance cultural artifacts. • Employ AI technologies for the recovery and translation of ancient texts, preservation of endangered languages, and semantic analysis of historical documents. • Understand how AI supports the development of personalized digital guides, smart museums, and recommender systems, enriching the cultural experience. • Recognize the ethical and social issues associated with the use of AI in cultural contexts.
General Skills

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

- 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

27. Introduction to Artificial Intelligence (AI): basic definitions, history, evolution of AI, overview of applications in culture contexts
28. Problem solving: problem description and solution search algorithms
29. Knowledge representation: semantic networks, ontologies, rule-based systems, semantic web
30. Knowledge systems: structure and function, expert systems, agent systems
31. Machine learning: Supervised learning, classification challenges, support vector machines, unsupervised learning, reinforcement learning
32. Artificial Neural Networks (ANNs) and deep learning: Basic architectures, training methods, iterative and convolutional neural networks.
33. AI for heritage preservation and protection: digitization, artwork restoration, predictive conservation techniques
34. Cultural linguistics and AI: natural language processing, preservation of endangered languages, recovery and translation of ancient texts, decoding of epigraphic signs, semantic analysis of historical texts.
35. AI and cultural tourism: personalised digital guides, recommender systems, smart museums, augmented reality and gamification.
36. Artwork analysis with AI: artwork authentication, chronological classification, style detection and artist identification.
37. Applications of AI in music and performing arts: analysis and synthesis of musical pieces, tracing the origin of traditional songs, recording and modelling of traditional dances.
38. Generative AI and its applications in culture: text generation and speech synthesis, generative artwork
39. Ethical issues and emerging trends in artificial intelligence: Digital twins in cultural heritage and related ethical considerations

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	<ul style="list-style-type: none"> • 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

<p>TEACHING ORGANIZATION</p> <p><i>The ways and methods of teaching are described in detail.</i></p> <p><i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	Activity	Workload/semester
	Lectures	26
	Laboratory Exercise	13
	Essay	30
	Projects	38
	Study and analysis of bibliography	40
	Written examination	3
	Total	150
<p>STUDENT EVALUATION</p> <p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative</p> <p>Essay (compulsory): 50%</p> <p>Final written examination: 50%</p>	

5. SUGGESTED BIBLIOGRAPHY

- Aggarwal, C. C. (2018). Νευρωνικά δίκτυα και βαθιά μάθηση. Εκδόσεις Fountas.
- Fiorucci, M., Khoroshiltseva, M., Pontil, M., Traviglia, A., Del Bue, A., & James, S. (2020). Machine learning for cultural heritage: A survey. *Pattern Recognition Letters*, 133, 102-108.
- Pitas, I. (2022) *Artificial Intelligence Science and Society / Part A: Introduction to AI Science and Information Technology: Part A: Introduction to AI Science and Information Technology.*
- Russell, S. J., & Norvig, P. (2016). *Artificial intelligence: a modern approach.* Pearson.
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- Βλαχάβας, Ι., Κεφαλάς, Π., Βασιλειάδης, Ν., Κόκκορας, Φ., & Σακελλαρίου, Η. (2006). *Τεχνητή νοημοσύνη. Γ Έκδοση.* Γκιούρδας
- Παναγιωτακόπουλος, Χ., Τσαλίδης, Χ., Γάκης, Π., & Κόκκινος, Θ. (2022). *Υπολογιστική γλωσσολογία [Προπτυχιακό εγχειρίδιο].* Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. <https://dx.doi.org/10.57713/kallipos-127>

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.

(58) Please write YES or NO

(59) 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.

(60) 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.

COURSE OUTLINE

FUNDAMENTAL PRINCIPLES AND TOOLS OF AR/VR FOR ARTS AND 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	5 TH
COURSE TITLE	FUNDAMENTAL PRINCIPLES AND TOOLS OF AR/VR FOR ARTS AND CULTURE		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>										
Upon successful completion of the course, participants will be able to: <ul style="list-style-type: none"> • Understand key concepts of AR/VR (e.g., immersion, interactivity, mixed reality, spatial computing) • Analyze case studies of AR/VR in the arts and culture • Use tools (e.g., Unity, Unreal Engine, ARKit, WebXR) to develop basic AR/VR projects tailored to the arts and culture • Design digital exhibitions that allow cultural space visitors to interact with art and objects in innovative ways • Integrate 3D models for AR/VR environments in artistic or cultural applications • Work in teams to develop AR/VR applications that combine technology, storytelling, and artistic expression 										
General Skills <i>Name the desirable general skills upon successful completion of the module</i>										
<table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td></td> <td><i>Demonstration of social, professional and moral</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>		<i>Demonstration of social, professional and moral</i>
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>									
<i>ICT Use</i>	<i>Equity and Inclusion</i>									
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>									
<i>Decision making</i>	<i>Sustainability</i>									
	<i>Demonstration of social, professional and moral</i>									

<i>Autonomous work</i>	<i>responsibility and sensitivity to gender issues</i>
<i>Teamwork</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	
<ul style="list-style-type: none">• Search, analysis and synthesis of data and information, ICT Use• Autonomous work• Teamwork• Equity and Inclusion• Demonstration of social, professional and moral responsibility and sensitivity to gender issues• Promoting free, creative and inductive reasoning	

3. COURSE CONTENT

1. Introduction to AR/VR Technologies

- Overview of AR/VR technologies
- Overview of AR/VR in the arts and culture
- Differences between AR and VR, key technologies (immersion, interaction)
- Examples of successful cultural projects using AR/VR

2. History and Evolution of AR/VR in the Arts

- Overview of the development of AR/VR in the arts
- Milestones and pioneering projects
- Impact of AR/VR on traditional art forms and exhibitions

3. Understanding Immersion and Interaction

- The importance of immersion and interaction in AR/VR
- How these elements shape user experience in virtual environments

4. Basic Principles of 3D Modeling and Digital Asset Creation

- Introduction to 3D modeling for AR/VR environments
- Blender/Maya for creating 3D assets
- Creating digital assets for cultural applications

5. AR in Museums and Cultural Institutions

- The role of AR in museums
- Case studies
- Challenges of integrating AR into traditional spaces

6. VR and Cultural Heritage

- The use of VR for historical reconstructions and spaces
- Case studies

7. Platforms and Tools: Unity, Unreal Engine, ARKit

- Overview of Unity, Unreal Engine, and ARKit
- Basic development of AR/VR applications on these platforms

8. Designing User-Centered AR/VR Experiences

- UX/UI design principles in AR/VR
- Case studies

9. AR/VR in Digital Art and Interactive Installations

- Applications of AR/VR in contemporary digital art
- Examples of interactive installations using AR/VR

10. Multimedia Narratives Using AR/VR

- Using AR/VR for storytelling experiences in cultural environments
- Combining multimedia (audio, image, text) in virtual environments

11. Challenges and Limitations of AR/VR for Culture

- Technical and artistic challenges in using AR/VR for culture (cost, technological infrastructure, accessibility)
- Solutions – Possible approaches

12. Future Trends in AR/VR for Arts and Culture

- Emerging trends in AR/VR (AI, metaverse, holograms)

- Implications for arts and culture
- The role of the audience

13. Conclusions – Final Project Presentation – Student Feedback

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Classroom lectures • Workshops • Active learning (hands-on learning) – Experiential learning • Collaborative learning 																	
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<ul style="list-style-type: none"> • Use of ICT in Teaching and Communication with Students • PPT presentations • Use of digital tools and platforms • Teaching materials, announcements, and communication via the eClass platform • Student study of supporting materials related to the course content • Communication with students via email 																	
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th><i>Activity</i></th> <th><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Workshops</td> <td>13</td> </tr> <tr> <td>Final Project</td> <td>30</td> </tr> <tr> <td>Weekly Projects</td> <td>38</td> </tr> <tr> <td>Study</td> <td>40</td> </tr> <tr> <td>Final Exam</td> <td>3</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>		<i>Activity</i>	<i>Workload/semester</i>	Lectures	26	Workshops	13	Final Project	30	Weekly Projects	38	Study	40	Final Exam	3	Total	150
	<i>Activity</i>	<i>Workload/semester</i>																
	Lectures	26																
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	Study	40																
	Final Exam	3																
Total	150																	
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are</i></p>																		
<p>Formative</p> <p>Weekly Projects: 40%</p> <p>Final project: 30%</p> <p>Final Exam: 30%</p>																		

informed

5. SUGGESTED BIBLIOGRAPHY

Bosworth, M., Lakshmi, S. 2018. *Crafting Stories for Virtual Reality*. Routledge

Greengard, S. 2019. *Virtual Reality*. MIT Press

Jerald, J., 2015. *The VR Book. Human-Centered Design for Virtual Reality*. ACM Books

Trizio, I., Demetrescu, E., Ferdani, I. (eds.) 2023. *Digital Restoration and Virtual Reconstructions. Case Studies and Compared Experiences for Cultural Heritage*. Springer

Whyte, J., Nikolic, D. 2018. *Virtual Reality and the Built Environment*. Routledge.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXX
Contact details:	XXXX
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly Projects: 40% Final project: 30% Final Exam: 30%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(61) Please write YES or NO

(62) 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.

(63) 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.

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	5 TH
COURSE TITLE	GEOGRAPHIC INFORMATION SYSTEMS IN CULTURE		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>										
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • 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. 										
<p>General Skills <i>Name the desirable general skills upon successful completion of the module</i></p> <table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>									
<i>ICT Use</i>	<i>Equity and Inclusion</i>									
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>									
<i>Decision making</i>	<i>Sustainability</i>									
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>									

<i>Teamwork</i>	<i>Critical thinking</i>
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	
<ul style="list-style-type: none"> • 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

40. Introduction to Geographic Information Systems (GIS) in Culture
41. Key definitions, concepts, and tools of Topography
42. Fundamental concepts of GIS
43. Collection of spatial data: methods and tools
44. Digital mapping of cultural heritage
45. Spatial analysis using GIS tools
46. Management of geospatial data and metadata in culture
47. Digital terrain models and three-dimensional modelling in cultural spaces
48. Remote sensing and aerial photography in cultural heritage
49. Visualisation and dissemination of spatial data related to cultural heritage
50. Planning for the protection of cultural heritage using GIS
51. Analysis and mapping of archaeological sites with GIS
52. Application of GIS in museum exhibitions

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	<ul style="list-style-type: none"> • 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 <i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i>	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	Formative	

<p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Essay (compulsory): 50%</p> <p>Final written examination: 50%</p>
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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.

(64) Please write YES or NO

(65) Note down the evaluation methods used by the teacher, e.g.

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- written or oral examination with distance learning methods, provided that the integrity and reliability of the examination are ensured.

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

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

COURSE OUTLINE
COMMUNICATION

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	5 TH
COURSE TITLE	COMMUNICATION		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>														
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Comprehend the main theories of Communication. • Be familiar with key theories, terms, concepts and research methods of Communication. • Understand key features of the components of communication along with social influence processes underlying communication. • Know the various forms, types, kinds and applications of communication theory and research. • Comprehend the intercultural dimension of communication. • To identify and study the persuasive communication processes on both the interpersonal and the intergroup level. • Be aware of methods and techniques of effective communication. 														
<p>General Skills <i>Name the desirable general skills upon successful completion of the module</i></p> <table> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>													
<i>ICT Use</i>	<i>Equity and Inclusion</i>													
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>													
<i>Decision making</i>	<i>Sustainability</i>													
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>													
<i>Teamwork</i>	<i>Critical thinking</i>													
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>													

<i>Working in an interdisciplinary environment</i>
<i>Production of new research ideas</i>
<ul style="list-style-type: none"> • Adaptation to new situations • Autonomous work • Working in an international environment • Working in an interdisciplinary environment • Equity and Inclusion • Critical thinking • Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Communication: Theoretical underpinnings (From LeBon to McLuhan and Lasswell).
2. Communication as a process of social influence.
3. Attitudes and attitude change through persuasive communication processes.
4. Constructive components of communication – Source, message, receiver(s).
5. Social cognition and the construction of meaning.
6. Communication effects on emotion and behavior.
7. Forms of communication.
8. Interpersonal communication.
9. Mass communication.
10. Communication and ideology.
11. Communication and culture – Communicational contexts and intercultural differences.
12. Communication strategies – Design and implementation.
13. Practices of effective communication - Reliability of the source, message formation, receivers' acceptance.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	Face to face	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	E class, e mail, live streaming	
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i> <i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i>	Activity	Workload/semester
	Classes attendance	39
	Individual reading and preparation for the written exams	47
	Essay writing (literature review)	41
	Essay presentation in classroom	20
	Final exam	3
	Total	150
STUDENT EVALUATION		

<p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Essay writing (literature review) – 30%</p> <p>Written examination at the end of the semester – 70%</p>
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5. SUGGESTED BIBLIOGRAPHY

Textbooks

- Foss, K.A. (2012). Θεωρίες ανθρώπινης επικοινωνίας (Επιμ. Α. Γαρδικιώτης). Πεδίο.
- Σακαλάκη, Μ. (1994). Ψυχολογία της επικοινωνίας: Θεωρητικά ρεύματα και προοπτικές της έρευνας. Παπαζήσης.
- Marchand, P.J., Girard, P., Fourquet - Courbet, F., VanDijk, M-P., Ginet, T.A., Burguet, A (2009). Κοινωνική ψυχολογία των Μ.Μ.Ε. (Επιμ. Στ. Παπαστάμου). Πεδίο.

Other Recommended Bibliography

- Denis McQuail & Mark Deluze (2021). ΜΜΕ και θεωρία της μαζικής επικοινωνίας. Παπαζήσης.
- Curran, J. & Gutewitch, M. (Επιμ.) (2020). ΜΜΕ και κοινωνία. Πατάκης.
- Χρηστάκης, Ν. (2016). Ψυχοκοινωνιολογία των μαζικών επικοινωνιών. Gutenberg.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	E. LAMPRIDIS
Contact details:	elamprid@he.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Essay writing (literature review) – 30% Written examination at the end of the semester – 70%
Implementation Instructions: (3)	Detailed information are uploads at the e class of the course. Students electronically submit their essays until the 10 th week of classes. Written examination through e class platform. Students answer to 30 multiple choice questions randomly presented to each student. Time for answering each question two minutes. In order to pass the course students should answer correctly at least to 50%of the questions. The final mark is calculated taking into account students' performance in the essay as presented above.

(67) Please write YES or NO

(68) 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.

(69) 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.

6TH SEMESTER

COURSE OUTLINE

WEB APPLICATIONS DEVELOPMENT FOR CULTURAL AND ARTISTIC ORGANIZATIONS

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	6 TH
COURSE TITLE	WEB APPLICATIONS DEVELOPMENT FOR CULTURAL AND ARTISTIC ORGANIZATIONS		
TEACHING ACTIVITIES <i>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.</i>		TEACHING HOURS PER WEEK	ECTS CREDITS
		3	5
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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:

- Know about web technologies, such as client-server architecture, front-end, and back-end technologies.
- Design and develop user-friendly web interfaces using HTML, CSS, and JavaScript, tailored for cultural and artistic organisations.
- Using programming libraries and frameworks to add interactivity to web applications.
- Develop back-end applications using databases and server-side programming.
- Create and manage dynamic web applications, including digital exhibitions and online catalogues, to support the operations of cultural institutions.
- Understand the importance of accessibility and usability in web applications, ensuring that cultural and artistic content is accessible to all users, including people with disabilities.
- Implement online application security policies to protect the integrity and confidentiality of user data in online cultural services.
- Evaluate online applications developed for cultural and artistic organisations and identify best practices.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information, Project design and management Equity and Inclusion

<i>ICT Use</i>	<i>Respect for the natural environment</i>
<i>Adaptation to new situations</i>	<i>Sustainability</i>
<i>Decision making</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>
<i>Autonomous work</i>	<i>Critical thinking</i>
<i>Teamwork</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an international environment</i>	
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	
<ul style="list-style-type: none"> • 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

53. Overview of web technologies
54. Basic web languages (HTML and CSS)
55. Introduction to JavaScript
56. Principles of web design
57. Basic principles for web content accessibility
58. Application frameworks for front-end development
59. Server-side programming
60. Online databases
61. Web services and communication protocols
62. Application frameworks for back-end development
63. Content management systems for cultural organisations
64. Platforms for developing digital repositories of cultural content
65. Security of online applications and user data

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)	<ul style="list-style-type: none"> • 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	Activity	Workload/semester
<p><i>The ways and methods of teaching are described in detail.</i></p> <p><i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated</i></p>	Lectures	26
	Laboratory Exercise	13
	Essay	30
	Projects	38
	Study and analysis of bibliography	40
	Written examination	3
	Total	150

<p><i>here, so that total workload per semester complies to ECTS standards.</i></p>	
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative Essay (compulsory): 50% Final written examination: 50%</p>

5. SUGGESTED BIBLIOGRAPHY

<ul style="list-style-type: none"> • Ackermann, P. (2023). Full Stack Web Development: The Comprehensive Guide (Rheinwerk Computing). Rheinwerk Computing. • Conolly, R., and Hoar, R. (2015) Προγραμματισμός για το Web, 3η Έκδοση. Εκδόσεις Γκιούρδας. • Δουληγέρης Χ., Μαυροπόδη Ρ., Κοπανάκη Ε., Καραλής Α. (2017). Τεχνολογίες και Προγραμματισμός στον Παγκόσμιο Ιστό. Εκδόσεις Νέων Τεχνολογιών. • Κεντερλής, Π. (2017). Ανάπτυξη Διαδικτυακών Εφαρμογών. Εκδόσεις Λύχνος
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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.

(70) Please write YES or NO

(71) 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.

(72) 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.

COURSE OUTLINE
BIOINFORMATICS

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	6 TH
COURSE TITLE	BIOINFORMATICS		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																		
Upon successful completion of the course, participants will be able to: <ol style="list-style-type: none"> 1. Understand the fundamental concepts of bioinformatics and use basic bioinformatics tools. 2. Work with programming languages such as Python for data analysis and visualization. 3. Perform sequence alignments and analyse phylogenetic relationships between organisms. 4. Use biological databases to retrieve information. 5. Analyse next-generation sequencing (NGS) data. 6. Apply algorithms for genetic data analysis. 																		
General Skills <i>Name the desirable general skills upon successful completion of the module</i>																		
<table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> <tr> <td><i>Production of new research ideas</i></td> <td></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>		<i>Production of new research ideas</i>	
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>																	
<i>ICT Use</i>	<i>Equity and Inclusion</i>																	
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>																	
<i>Decision making</i>	<i>Sustainability</i>																	
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>																	
<i>Teamwork</i>	<i>Critical thinking</i>																	
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>																	
<i>Working in an interdisciplinary environment</i>																		
<i>Production of new research ideas</i>																		
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, utilizing necessary technologies 																		

- Adaptation to new situations
- Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1	Introduction to Bioinformatics	<ul style="list-style-type: none"> • Familiarization with the students and presentation of the course objectives, expected learning outcomes, and requirements • Historical overview of bioinformatics • Importance of bioinformatics and its interdisciplinary nature
2	Introduction to Linux I	<ul style="list-style-type: none"> • Familiarization with the Linux environment • Basic commands for file navigation and editing
3	Introduction to Linux II	<ul style="list-style-type: none"> • Installation and execution of programs for bioinformatics analyses
4	Biological Databases	<ul style="list-style-type: none"> • Introduction to basic biological databases (NCBI, Ensembl, SWISS-MODEL, ENCODE, etc.) • Data retrieval from the databases • Understanding types of data storage files
5	Introduction to Programming with Python	<ul style="list-style-type: none"> • Installation and basic elements of Python • Variables, data types, functions
6	Introduction to Programming with Python	<ul style="list-style-type: none"> • Reading files • Data visualization
7	Probability Theory and Statistics	<ul style="list-style-type: none"> • Random Variables • Distributions • Hypothesis Testing • Probability Theory
8	Algorithms in Bioinformatics	<ul style="list-style-type: none"> • Types of Algorithms • Sequence Alignment Algorithms • Sequence Similarity Algorithms • Dimensionality Reduction Algorithms
9	Python for Bioinformatics Analysis	<ul style="list-style-type: none"> • Biopython Package • Sequence Analysis • Simulations
10	Sequence Alignment	<ul style="list-style-type: none"> • Basic Theory and Methods for Sequence Alignment • Tools for Aligning DNA, RNA, and Proteins
11	Phylogenetics	<ul style="list-style-type: none"> • Basic Principles of Phylogenetic Tree Construction • Methods and Tools for Inferring Evolutionary Relationships (e.g., PhyML)
12	Analysis of Next-Generation Sequencing Data	<ul style="list-style-type: none"> • Introduction to Next-Generation Sequencing (NGS) • Processing and Analysis of Large-Scale Data • Tools for NGS Data Analysis (e.g., FastQC, BWA, GATK)
13	Recap	<ul style="list-style-type: none"> • Recap and resolving questions • Student feedback

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	Face to face	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	PowerPoint presentations Interactive Platforms for Practical Application Teaching material, announcements and communication through the eClass platform Student study of supplementary material related to course content Communication with students via email	
TEACHING ORGANIZATION	Activity	Workload/semester

<p><i>The ways and methods of teaching are described in detail.</i></p> <p><i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	Lectures	26
	Laboratory Exercise	13
	Essay	30
	Weekly projects/tasks	38
	Study and analysis of bibliography	40
	Written examination	3
	Total	150
	<p>STUDENT EVALUATION</p> <p><i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	

5. SUGGESTED BIBLIOGRAPHY

Teaching Aids

Κοσσιδά Σοφία (2008) Βιοπληροφορική, Δυνατότητες και Προοπτικές. Εκδόσεις Νέων Τεχνολογιών ISBN: 978-960-9309-60-8

In addition, scientific articles from high-impact journals from the last decade will be used

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXXXXXX
Contact details:	XXXXXXXX
Supervisors:	YES
Evaluation methods:	Weekly projects/tasks: 40% Essay (mandatory): 30% Final written examination: 30%
Implementation Instructions:	The written assessments and the final examination will be conducted via eClass on a date and time that will be announced along with their duration and content in a reasonable time prior to their occurrence. The assignment will be submitted via eClass by a specified date.

ICT Use Adaptation to new situations Decision making Autonomous work Teamwork Working in an international environment Working in an interdisciplinary environment Production of new research ideas	Respect for the natural environment Sustainability Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using the appropriate technologies • Individual work • Teamwork • Working in an interdisciplinary environment • Respect for diversity and multiculturalism • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promotion of free, creative, and inductive thinking 	

3. COURSE CONTENT

1	Narration (Storytelling): conceptual delimitations.
2	Narrative literary genres: study of structural elements and construction.
3	Study of narrative texts in greek and foreign literatures: identification of generic characteristics and structural elements.
4	Digital Storytelling: conceptual delimitations.
5	Narration vs. Digital Storytelling: similarities and differences.
6	Interactive digital narration and creative writing.
7	Digital media for creating digital narratives: presentation and study of tools and software for creating digital stories.
8	Applications: creating digital narratives using tools and platforms (Story Bird, Lego Comic Builder, Cosy Comic Strip Creator, Camtasia Studio, Story Jumper, Canva, etc.).
9	Utilization of digital narratives in education: conditions for successful use of Digital Storytelling as a learning strategy.
10	Utilization of digital narratives for interdisciplinary approaches in education.
11	Evaluation of digital narratives with reference to creativity, appeal, and their contribution to achieving educational/teaching goals.
12	Creation and presentation of digital narratives by students.
13	Evaluative assessment of the course.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	Face-to-Face/Lectures Differentiated instruction Collaborative teaching Laboratory teaching Flipped classroom Online communication for guidance and feedback during assignment preparation Collaboration among student groups
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students – Powerpoint presentations – Videos – Utilization of multimodal-multimedia material in teaching – Communication and coordination of study and

	assignment preparation via e-class and social media platforms.	
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	Activity	Workload/semester
	Lectures	26
	Study and analysis of bibliography	53
	Group collaboration/Laboratory applications	13
	Digital narratives creation	55
	Final examinations	3
	Total	150
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Lesson plans: 40%</p> <p>Final examinations: 60%</p>	

5. SUGGESTED BIBLIOGRAPHY

1. Αποστολίδου, Β. (2012). *Η λογοτεχνία στα νέα περιβάλλοντα των ΤΠΕ: κυβερνολογοτεχνία και e-books, ψηφιακές κοινότητες αναγνωστών, δημιουργική γραφή και αφήγηση στον ψηφιακό κόσμο*. Θεσσαλονίκη: Κέντρο Ελληνικής Γλώσσας.
<https://www.openbook.gr/i-logotechnia-sta-nea-perivallonta-twn-tpe/>
2. Γκουτσιουκώστα, Ζ. (2017). Ψηφιακές Ιστορίες (DigitalStories): Από το μαθητή αναγνώστη στο μαθητή συγγραφέα, στο Αποστολίδου, Β., Κόκορης, Μ., Μπακογιάννης, Γ. & Χοντολίδου, Ε. (επιμ.) *Λογοτεχνική ανάγνωση στο σχολείο και στην κοινωνία*, 729-740. Αθήνα: Gutenberg.
3. Μουταφίδου, Α & Μπράτισης, Θ. (2013). Ψηφιακή αφήγηση και δημιουργική γραφή : δύο παράλληλοι κόσμοι με κοινό τόπο. *1ο Διεθνές Συνέδριο Δημιουργικής Γραφής*.
http://cwconference.web.uowm.gr/archives/1st_conference/moutafidou_bratitsis_article.pdf
4. Rizvic, S., et al., (2019). Interactive digital storytelling: bringing cultural heritage in a classroom. *Journal of Computers in Education*, 6(1), 143–166.

doi: 10.1007/s40692-018-0128-7

5. Robin, B.R. (2016). The Power of Digital Storytelling to Support Teaching and Learning. *Digital Education Review*, 30, 17-29.

6. Storr, W. (2020). *Science of Storytelling. Why Stories Make Us Human, and How to Tell Them Better*. AbramsPress.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXXXX
Contact details:	XXXXXX
Supervisors: (1)	YES
Evaluation methods: (2)	Creation of digital narratives: 40% Final examinations: 60%
Implementation Instructions: (3)	The submission of assignments and the final exam will take place via e-Class on a predetermined date.

(73) Please write YES or NO

(74) 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.

(75) 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.

<i>ICT Use</i>	<i>Respect for the natural environment</i>
<i>Adaptation to new situations</i>	<i>Sustainability</i>
<i>Decision making</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>
<i>Autonomous work</i>	<i>Critical thinking</i>
<i>Teamwork</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an international environment</i>	
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	

- Search, analysis and synthesis of data and information,
- Adaptation to new situations
- Autonomous work
- Teamwork
- Working in an interdisciplinary environment
- Production of new research ideas
- Project design and management
- Critical thinking and self-reflection
- Equity and Inclusion
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Promoting free, creative and inductive reasoning

3. COURSE CONTENT

Week 1: Introduction to Innovation and Entrepreneurship in Cultural Tourism

Definition of innovation and its significance for business development in cultural tourism.
 Basic principles of entrepreneurship in the cultural sector.
 Methodologies for identifying business opportunities.

Week 2: Innovation in Cultural Tourism

Analysis and presentation of successful cultural enterprises developed through innovative approaches.
 Adaptation of cultural enterprises to current market trends and demands.

Week 3: Development and Competitiveness Strategies

Development of innovative business strategies in cultural tourism.
 Product and service differentiation to gain a competitive advantage.

Week 4: Leveraging Technology in Cultural Tourism

The importance of technology in enhancing entrepreneurship.
 Technological tools and platforms for optimizing cultural experiences.

Week 5: Creating a Sustainable Business Model

Steps for creating a sustainable business plan in cultural tourism.
 Presentation of successful examples of business models.
 Funding sources and capital for developing sustainable cultural enterprises.

Week 6: Digital Marketing for the Cultural Sector

Fundamental principles of digital marketing.
 Targeting strategies for the cultural tourism audience.

Week 7: Development of Cultural Products and Services

Designing cultural products that meet market trends.
 Social and economic value of cultural tourism services.

Week 8: Online Advertising and Digital Visibility

Online advertising strategies (PPC, display ads).
 SEO optimization for cultural organizations.

Week 9: Social Media Strategy

Social media management tools.
 Targeting and audience development on social media.

Week 10: Branding and Storytelling Strategies

Creating and managing cultural brands.
 Storytelling to enhance the cultural experience.

Week 11: Use of Data and Analytics in Digital Advertising

Introduction to Google Analytics, insights from social media.
Analyzing ad performance and optimizing strategies.

Week 12: Digital User Experience and Cultural Advantages

Creating cultural experiences through digital platforms.
Booking platforms and applications that facilitate tourism.

Week 13: Student Project Presentations and Conclusions

Presentations of business plans and marketing strategies by students.
Review of learning objectives and course evaluation.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> Lectures and Seminars: Presentation of theory and practical examples using audiovisual materials. Workshops: Practical application of marketing strategies and social media management through group work. Guest Speakers: Entrepreneurs and experts in the fields of culture and tourism. 															
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<p>Use of ICT in teaching and communication with students</p> <ul style="list-style-type: none"> PPT presentations Use of digital tools and platforms Teaching material, announcements and communication through the eClass platform Student study of supplementary material related to course content Communication with students via email 															
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th><i>Activity</i></th> <th><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>39</td> </tr> <tr> <td>Final Project</td> <td>30</td> </tr> <tr> <td>Weekly Projects / Tests</td> <td>38</td> </tr> <tr> <td>Bibliographic research & analysis</td> <td>40</td> </tr> <tr> <td>Written examination</td> <td>3</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>		<i>Activity</i>	<i>Workload/semester</i>	Lectures	39	Final Project	30	Weekly Projects / Tests	38	Bibliographic research & analysis	40	Written examination	3	Total	150
<i>Activity</i>	<i>Workload/semester</i>															
Lectures	39															
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Bibliographic research & analysis	40															
Written examination	3															
Total	150															
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p>	<p>Formative</p> <p>Group Projects: Collaboration to create a business plan or marketing campaign.</p> <p>Independent Case Studies: Analysis of successful and unsuccessful strategies in cultural tourism.</p> <p>Group Project (40%): Development of a business plan or digital marketing campaign for a cultural and/or tourism organization.</p>															

<i>examination of a patient, Artistic interpretation, Other/Others</i>	Individual Assignment (30%): Analytical case study of an existing business or campaign.
<i>Please indicate all relevant information about the course assessment and how students are informed</i>	Final Written Examination (30%): Theoretical questions covering the course material.

5. SUGGESTED BIBLIOGRAPHY

A. Arthur A., Jr. Thompson, John E. Gamble, Margaret A. Peteraf. (2024). Στρατηγικό μάρκετινγκ. Ανάλυση ανταγωνισμού και αποτίμηση εταιρικών στρατηγικών. Θεωρία και μελέτες περίπτωσης. ΕΚΔΟΣΕΙΣ Α.ΠΑΠΑΖΗΣΗΣ. Έκδοση: 1η έκδ./2024. Επιστημονική Επιμέλεια: Δημητρίου Δ., Σαρτζετάκη Μ. ISBN: 9789600243710

B. Ferrell O.C., Hirt G.A., Ferrell L. (2024). Μάρκετινγκ Επιχειρήσεων: Πλαίσιο, Αρχές και Τεχνικές, Broken Hill, Επιστημονική Επιμέλεια: Δημήτριος Ι. Δημητρίου, Αρίστη Γ. Καραγκούνη. ISBN: 9789925576371

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	K. RIGOPOULOS
Contact details:	krigopou@econ.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	<p>Group Project (40%): Development of a business plan or digital marketing campaign for a cultural and/or tourism organization.</p> <p>Individual Assignment (30%): Analytical case study of an existing business or campaign.</p> <p>Final Written Examination (30%): Theoretical questions covering the course material.</p>
Implementation Instructions: (3)	<p>Written assessments and the final exam will be conducted via eClass 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.</p> <p>The assignment must be submitted through eClass by a specified deadline.</p>

(76) Please write YES or NO

(77) 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.

(78) 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.

7TH SEMESTER

COURSE OUTLINE

DEEP LEARNING AND DIGITAL CULTURE APPLICATIONS

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	7 TH
COURSE TITLE	DEEP LEARNING AND DIGITAL CULTURE APPLICATIONS		
TEACHING ACTIVITIES		TEACHING HOURS PER WEEK	ECTS CREDITS
<i>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.</i>			
		3	5
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE	SCIENTIFIC AREA		
<i>Background, General Knowledge, Scientific Area, Skill Development</i>			
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 principles of deep learning, key concepts of neural networks, data processing, and machine learning frameworks.
- Identify cultural heritage projects suitable for artificial intelligence solutions.
- Apply deep learning techniques for digitizing cultural artifacts.
- Analyze literary sources through deep learning models.
- Evaluate the impact of artificial intelligence on cultural institutions.
- Develop skills in managing cultural data.

General Skills

Name the desirable general skills upon successful completion of the module

Search, analysis and synthesis of data and information,

ICT Use

Adaptation to new situations

Decision making

Autonomous work

Teamwork

Working in an international environment

Project design and management

Equity and Inclusion

Respect for the natural environment

Sustainability

Demonstration of social, professional and moral

responsibility and sensitivity to gender issues

Critical thinking

Promoting free, creative and inductive reasoning

<p><i>Working in an interdisciplinary environment</i></p> <p><i>Production of new research ideas</i></p> <ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, ICT Use • Autonomous work • Teamwork • Equity and Inclusion • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promoting free, creative and inductive reasoning
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3. COURSE CONTENT

1. Introduction to Deep Learning and Cultural Heritage
 - Overview of the basic principles of deep learning
 - The role of artificial intelligence in cultural heritage preservation
 - Examples of deep learning applications in museums, archives, and cultural institutions
2. Neural Networks: Understanding the Basics
 - Introduction to neural networks and their structure
 - Key concepts: neurons, layers, activation functions
 - Simple applications in cultural projects
3. Convolutional Neural Networks (CNNs) for Image Processing
 - Understanding CNNs and their applications in image recognition
 - Digitizing cultural artifacts and art
 - Case studies: Art restoration and virtual exhibitions
4. Natural Language Processing (NLP) in Literary Sources
 - How NLP works and its importance in analyzing literary sources
 - Text classification and sentiment analysis in cultural texts
 - Case study: Using deep learning for the translation of ancient scripts
5. Deep Learning for Audio and Music Archives
 - AI applications in the preservation of audio and music archives
 - Sound recognition and analysis in cultural heritage
 - Enhancement and restoration of old recordings
6. Generative Adversarial Networks (GANs) in Cultural Applications
 - Introduction to GANs and their creative applications
 - AI-generated art and reconstructions of historical artifacts
7. Virtual and Augmented Reality in Museums
 - Using deep learning to enhance VR/AR experiences in museums
 - Interactive storytelling through AI
 - Case studies: Virtual museum tours
8. Deep Learning for Image Restoration and Enhancement
 - Techniques for restoring and enhancing cultural images and videos
 - Application in archives of historical photos and films
9. Data Management in AI Cultural Projects
 - Managing and curating large cultural datasets
10. Creating Virtual Museums with Artificial Intelligence
 - Step-by-step process of creating a virtual museum using AI
 - Customizing the user experience through deep learning
 - Examples of AI-powered virtual exhibitions
11. Collaborative AI Projects in Cultural Heritage
 - Interdisciplinary collaborations between AI and culture
 - Examples of successful collaborative projects
12. Deep Learning for Cultural Site Reconstructions
 - Using deep learning for 3D representation of historical buildings and sites
 - Creating virtual reconstructions of cultural monuments
 - Example: Archaeological sites in virtual environments
13. Conclusions – Feedback

4. RNING & TEACHING METHODS - EVALUATION

TEACHING METHOD	<ul style="list-style-type: none"> • Classroom lectures
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<p><i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Workshops • Active learning (hands-on learning) – Experiential learning • Collaborative learning 																
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<ul style="list-style-type: none"> • Use of ICT in Teaching and Communication with Students • PPT presentations • Use of digital tools and platforms • Teaching materials, announcements, and communication via the eClass platform • Student study of supporting materials related to the course content • Communication with students via email 																
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th>Activity</th> <th>Workload/semester</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>26</td> </tr> <tr> <td>Workshops</td> <td>13</td> </tr> <tr> <td>Final Project</td> <td>30</td> </tr> <tr> <td>Weekly Projects</td> <td>38</td> </tr> <tr> <td>Study</td> <td>40</td> </tr> <tr> <td>Final Exam</td> <td>3</td> </tr> <tr> <td>Total</td> <td>150</td> </tr> </tbody> </table>	Activity	Workload/semester	Lectures	26	Workshops	13	Final Project	30	Weekly Projects	38	Study	40	Final Exam	3	Total	150
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<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative</p> <p>Weekly Projects: 40%</p> <p>Final project: 30%</p> <p>Final Exam: 30%</p>																

5. SUGGESTED BIBLIOGRAPHY

Goodfellow, I., Bengio, Y., Courville, A. 2016. *Deep Learning*. MIT Press
 Ekman, M. 2021. *Learning Deep Learning*. Addison Wesley

Kelleher, D. J. 2019. *Deep Learning*. MIT Press
Raschka, S., Mirjalili, V. 2019. *Python Machine Learning. Machine Learning and Deep Learning with Python, Scikit-Learn, and Tensorflow 2*, Packt Publishing
Sejnowski, T. J. 2018. *The Deep Learning Revolution*. MIT Press
Yong Jin, D. 2021. *Artificial Intelligence in Cultural Production. Critical Perspectives on Digital Platforms*. Routledge

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXX
Contact details:	XXXX
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly Projects: 40% Final project: 30% Final Exam: 30%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(79) Please write YES or NO

(80) 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.

(81) 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.

COURSE OUTLINE

APPLICATION DEVELOPMENT – GAMIFICATION

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	7 TH
COURSE TITLE	APPLICATION DEVELOPMENT – GAMIFICATION		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • design and develop gamification applications that incorporate game mechanics (points, levels, rewards) to enhance user engagement in cultural and educational environments, • utilize game development platforms such as Unity, Unreal Engine, and their respective programming languages to create interactive applications with educational and cultural elements, • apply learning theories to engage users and enhance commitment in educational applications, • leverage gamification as an educational tool to promote cultural heritage and create learning experiences that connect education with interactive technologies, • analyze and integrate reward and challenge systems to foster interaction and challenge in educational contexts, thereby increasing user engagement, • design user interfaces (UI) and user experiences (UX) for gamification applications, ensuring usability and user engagement through interactive elements, • incorporate multimedia and augmented reality (AR) into gamification applications to enhance interactivity and the learning experience in cultural and educational contexts, • design serious games used in education and cultural heritage, incorporating progressive challenges and educational incentives, • evaluate gamification applications through the collection and analysis of user data to improve engagement and the learning experience.
General Skills <i>Name the desirable general skills upon successful completion of the module</i> <i>Search, analysis and synthesis of data and Project design and management</i>

information, ICT Use Adaptation to new situations Decision making Autonomous work Teamwork Working in an international environment Working in an interdisciplinary environment Production of new research ideas	Equity and Inclusion Respect for the natural environment Sustainability Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, • Adaptation to new situations • Autonomous work • Teamwork • Working in an interdisciplinary environment • Production of new research ideas • Project design and management • Critical thinking and self-reflection • Equity and Inclusion • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promoting free, creative and inductive reasoning 	

3. COURSE CONTENT

1. **Introduction to Gamification and Game-Based Learning**
 Introduction to gamification, key concepts, and game elements (points, levels, rewards).
 Game-based learning and its application in cultural and educational contexts.
Workshop: Identifying gamification elements in existing educational and cultural applications.
2. **Categories of Games and Educational Gamification**
 Categories of digital games, with an emphasis on serious games. Application of gamification in education and cultural environments.
Workshop: Analyzing successful examples of gamification in education.
3. **Application Programming with Unity – Basic Concepts**
 Introduction to Unity, scripting, and interactive features for developing educational applications with game elements.
 Creating the first application in Unity with the integration of points and rewards.
4. **Programming with Unreal Engine – Applications in Cultural Contexts**
 Basic functions of Unreal Engine for developing cultural applications with gamification elements.
 Developing a simple interactive application for a cultural environment using Unreal Engine.
5. **Learning Theories and Their Application in Digital Gamified Applications**
 Analysis of game-based learning and how it enhances user engagement and participation.
Workshop: Designing educational content within a gamification framework.
6. **Development of Reward and Challenge Systems**
 Creating and implementing reward and challenge systems in educational and cultural contexts.
Workshop: Integrating points, levels, and challenges into an application designed in Unity.
7. **User Data Management and Progress Analysis Systems**
 User progress analysis systems and data management with databases and APIs.
Workshop: Connecting applications with user databases and storing performance data.
8. **User Interface (UI) and User Experience (UX) Design with Gamification**
 Designing UI/UX for gamified applications with a focus on user experience in educational and cultural contexts.
Workshop: Designing user interfaces that incorporate game elements.
9. **Multimedia and Augmented Reality (AR) for Gamification**
 Using multimedia and augmented reality (AR) to enhance the user experience in applications with game elements.

Workshop: Creating an application with AR features and integrating gamification mechanisms.

10. **Serious Games and Applications in Education**

Serious games and their educational value. Examples of games that promote cultural heritage.

Workshop: Developing a serious game that incorporates educational elements.

11. **Evaluation and Improvement of Gamified Applications**

Methods for evaluating educational gamified applications. How to collect user data for improving the experience.

Workshop: Assessing user engagement and participation through data analysis from an existing application.

12. **Prototyping and Pilot Testing**

Creating prototypes and conducting pilot tests to evaluate educational and cultural applications with game elements.

Workshop: Developing functional prototypes and testing them in an educational context.

13. **Presentation and Final Evaluation**

Course review and evaluation of projects. Feedback on the design and development of applications.

Workshop: Presentation of completed gamification projects by students and final evaluation.

4. **LEARNING & TEACHING METHODS - EVALUATION**

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 																	
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<p>Use of ICT in teaching and communication with students</p> <ul style="list-style-type: none"> • PPT presentations • Use of digital tools and platforms • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 																	
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<table border="1"> <thead> <tr> <th data-bbox="676 1223 1015 1256"><i>Activity</i></th> <th data-bbox="1015 1223 1356 1256"><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="676 1256 1015 1290">Lectures</td> <td data-bbox="1015 1256 1356 1290">26</td> </tr> <tr> <td data-bbox="676 1290 1015 1323">Laboratory Exercise</td> <td data-bbox="1015 1290 1356 1323">13</td> </tr> <tr> <td data-bbox="676 1323 1015 1357">Final Project</td> <td data-bbox="1015 1323 1356 1357">30</td> </tr> <tr> <td data-bbox="676 1357 1015 1391">Weekly Projects / Tests</td> <td data-bbox="1015 1357 1356 1391">38</td> </tr> <tr> <td data-bbox="676 1391 1015 1469">Bibliographic research & analysis</td> <td data-bbox="1015 1391 1356 1469">40</td> </tr> <tr> <td data-bbox="676 1469 1015 1503">Written examination</td> <td data-bbox="1015 1469 1356 1503">3</td> </tr> <tr> <td data-bbox="676 1503 1015 1536">Total</td> <td data-bbox="1015 1503 1356 1536">150</td> </tr> </tbody> </table>		<i>Activity</i>	<i>Workload/semester</i>	Lectures	26	Laboratory Exercise	13	Final Project	30	Weekly Projects / Tests	38	Bibliographic research & analysis	40	Written examination	3	Total	150
<i>Activity</i>	<i>Workload/semester</i>																	
Lectures	26																	
Laboratory Exercise	13																	
Final Project	30																	
Weekly Projects / Tests	38																	
Bibliographic research & analysis	40																	
Written examination	3																	
Total	150																	
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer</i></p>	<p>Formative</p> <p>Weekly Projects: 40%</p> <p>Assignment (mandatory): 30%</p> <p>Final Exam: 30%</p>																	

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

5. SUGGESTED BIBLIOGRAPHY

Greek Language Bibliography

1. Βούλγαρη, Η., Ροϊνιώτη, Ε., Κουτρομάνος, Γ., Σιντόρης, Χ., & Μάνεσης, Δ. (2024). Ψηφιακά παιχνίδια και μάθηση [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. <https://dx.doi.org/10.57713/kallipos-250>

Foreign Language Bibliography

1. McGonigal, J. (2011). Reality Is Broken: Why Games Make Us Better and How They Can Change the World. London: Penguin.
2. Kim, S., Song, K., Lockee, B., & Burton, J. (2018). Gamification in Learning and Education: Enjoy Learning Like Gaming. Springer International Publishing, Advances in Game-Based Learning.
3. Mortara, M., Catalano, C.E., Bellotti, F., Fiucci, G., Houry-Panchetti, M., & Petridis, P. (2014). Learning Cultural Heritage by Serious Games. Journal of Cultural Heritage, 15(3), 318-325.
4. Zichermann, G. & Cunningham, C. (2011). Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps. Sebastopol, CA: O'Reilly Media.
5. Schmalstieg, D., & Hollerer, T. (2016). Augmented Reality: Principles and Practice. Boston, MA: Addison-Wesley.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	xxxxxx
Contact details:	xxxxxx
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly Projects: 40% Assignment (mandatory): 30% Final Exam: 30%
Implementation Instructions: (3)	Written assessments and the final exam will be conducted via eClass 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.

(82) Please write YES or NO

(83) 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.

(84) 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.

COURSE OUTLINE

COMPUTER SCIENCE IN EDUCATION

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	7 TH
COURSE TITLE	COMPUTER SCIENCE IN EDUCATION		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	SKILL DEVELOPMENT		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>
<p>After the successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Study and understand the institutional framework of Computer Science education in Greek schools. • Analyze and formulate evaluative judgments/assessments for the Curriculum of Computer Science in primary and secondary education. • Analyze and formulate evaluative judgments/assessments for the textbooks of Computer Science in primary and secondary education. • Familiarize themselves with innovative ways to utilize digital tools, platforms, and resources to create engaging, student-oriented learning environments. • Apply knowledge and skills for the effective teaching of Computer Science in primary and secondary education. • Utilize AI-based tools for teaching Computer Science. • Design and implement activities that leverage the STEM/STEAM methodology. • Develop skills for designing and implementing lessons in primary and secondary education, incorporating cutting-edge educational technology and pedagogical strategies in their teaching choices. • Apply differentiated/personalized instruction using adaptive technologies. • Implement methods for assessing expected learning outcomes through digital tools.
General Skills <i>Name the desirable general skills upon successful completion of the module</i>

<p><i>Search, analysis and synthesis of data and information,</i> <i>ICT Use</i> <i>Adaptation to new situations</i> <i>Decision making</i> <i>Autonomous work</i> <i>Teamwork</i> <i>Working in an international environment</i> <i>Working in an interdisciplinary environment</i> <i>Production of new research ideas</i></p>	<p><i>Project design and management</i> <i>Equity and Inclusion</i> <i>Respect for the natural environment</i> <i>Sustainability</i> <i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i> <i>Critical thinking</i> <i>Promoting free, creative and inductive reasoning</i></p>
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, using the appropriate technologies • Adaptation to new situations • Decision making • Autonomous work • Teamwork • Working in an interdisciplinary environment • Respect for diversity and multiculturalism • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promotion of free, creative, and inductive thinking 	

3. COURSE CONTENT

1	Introduction, updates, organization of the course. Scientific writing.
2	The subject of Computer Science in primary and secondary education: a brief historical overview, institutional framework, models for integrating ICT in education.
3	Computer Science curricula and school textbooks in primary and secondary education: a critical perspective.
4	Objectives of the Computer Science courses.
5	Teaching methodology for the Computer Science courses in primary and secondary education.
6	Introduction to educational software.
7	Innovative ways to utilize digital tools, platforms, and resources to create engaging, student-oriented learning environments.
8	Utilization of learning management systems, multimedia tools, and interactive simulations to support the teaching of Computer Science.
9	Digital applications/digital media: the contribution of the subject of Computer Science to the implementation of innovations in teaching.
10	Computational thinking and STEM/STEAM.
11	Artificial intelligence in Computer Science teaching.
12	Lesson design for a unit from the curricula of Computer Science courses for primary education.
13	Lesson design for a unit from the curricula of Computer Science courses for secondary education.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Face-to-face/Lectures • Differentiated teaching • Online communication for guidance and feedback during lesson plan development • Laboratory teaching/applications
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)</p>	<p>Use of ICT in</p> <ul style="list-style-type: none"> – teaching – laboratory training

<p><i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<p>– communication with students</p>	
<p>TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>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.</i></p> <p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	<p>Activity</p>	<p>Workload/semester</p>
	<p>Lectures</p>	<p>26</p>
	<p>Study and analysis of bibliography</p>	<p>53</p>
	<p>Laboratory training/applications</p>	<p>13</p>
	<p>Development of lesson plans</p>	<p>55</p>
	<p>Examinations</p>	<p>3</p>
	<p>Total</p>	<p>150</p>
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Lesson plans: 40% Final examinations: 60%</p>	

5. SUGGESTED BIBLIOGRAPHY

1. Βούλγαρη, Η., Ροϊνιώτη, Ε., Κουτρομάνος, Γ., Σιντόρης, Χ., & Μάνεσης, Δ. (2024). *Ψηφιακά παιχνίδια και μάθηση* [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. <https://dx.doi.org/10.57713/kallipos-250>
2. Δημητριάδης, Σ. (2015). *Θεωρίες μάθησης και εκπαιδευτικό λογισμικό* [Προπτυχιακό εγχειρίδιο]. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. <https://dx.doi.org/10.57713/kallipos-665>
3. Miller, M. D. (2014). *Minds online: Teaching effectively with technology*. Harvard University Press.
4. Παγγέ, Τ. (2015). *Εκπαιδευτική τεχνολογία και εφαρμογές διαδικτύου*. Εκδόσεις Δίσιγμα. Κάλλιπος, Ανοικτές Ακαδημαϊκές Εκδόσεις. <https://dx.doi.org/10.57713/kallipos-335>
5. Roblyer, D. & Doering H. A. (2014). *Εκπαιδευτική Τεχνολογία και Διδασκαλία* (Επιμ. Μουντρίδου Μ.). Αθήνα: Εκδοτικός Όμιλος Ίων.

6. Φεσάκης Γ. (2019). *Εισαγωγή στις εφαρμογές των ψηφιακών τεχνολογιών στην εκπαίδευση*. Αθήνα: Gutenberg.
7. Ψυχάρης Σ., Καλοβρέκτης Κ. (2021). *Διδακτική και σχεδιασμός εκπαιδευτικών δραστηριοτήτων STEM & ΤΠΕ*. Θεσσαλονίκη: Εκδόσεις Τζιόλα.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	K. SGOUROPOULOS
Contact details:	ksgourop@he.duth.gr
Supervisors: (1)	NO
Evaluation methods: (2)	Lesson plans: 40% Final examinations: 60%
Implementation Instructions: (3)	The submission of assignments and the final exam will take place via e-Class on a predetermined date.

(85) Please write YES or NO

(86) 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.

(87) 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.

COURSE OUTLINE

PRACTICUM

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	7 TH
COURSE TITLE	PRACTICUM		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	SKILLS DEVELOPMENT		
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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																		
Upon successful completion of the course, participants will be able to: <ul style="list-style-type: none"> • Apply and utilize their acquired theoretical knowledge • Equip themselves with innovative applied knowledge • Gain the necessary skills and foundations so that upon graduation, they can fill not only traditional employment settings (e.g., secondary public and private education) but also have alternative employment opportunities. 																		
General Skills <i>Name the desirable general skills upon successful completion of the module</i>																		
<table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> <tr> <td><i>Production of new research ideas</i></td> <td></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>		<i>Production of new research ideas</i>	
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>																	
<i>ICT Use</i>	<i>Equity and Inclusion</i>																	
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>																	
<i>Decision making</i>	<i>Sustainability</i>																	
<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>																	
<i>Teamwork</i>	<i>Critical thinking</i>																	
<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>																	
<i>Working in an interdisciplinary environment</i>																		
<i>Production of new research ideas</i>																		

- Research, analysis, and synthesis of data and information, utilizing the necessary technologies
- Adaptation to new situations
- Decision-making
- Independent work
- Teamwork
- Work in an interdisciplinary environment
- Generation of new research ideas
- Respect for diversity and multiculturalism
- Exercise of critical thinking and self-criticism
- Promotion of free, creative, and inductive thinking

3. COURSE CONTENT

The Practicum includes:

A. Attendance at seminars on the following topics:

- The Curriculum for Modern Greek Language and Literature in Secondary Education.
- The Curriculum for Ancient Greek Language and Literature in Secondary Education.
- Basic skills for approaching Byzantine texts.
- Alternative teaching methods (applications of project-based learning and differentiated instruction).
- Reading promotion. Selection of texts, strategies for approaching them, and connecting literature with other arts.
- Creative writing - Reading encouragements.
- The philologist in the Library and Archive.
- Philological editing of texts.
- The philologist in the Museum: Management of cultural heritage.
- Techniques of Dramatization.
- Dramatic Poetry and Dramatization: Skills for approaching ancient theater.
- The utilization of Cinema in education.
- "Επιχειρήσιμ": Design and implementation of a business plan, taking into account internal environmental parameters.

B. Practical exercise in an organization.

C. Preparation of a project.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 	
TEACHING ORGANIZATION <i>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.</i>	Activity	Workload/semester
	Lectures	39
	Internship in an organization	100
	Essay	11
	Total	150

<p><i>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</i></p>	
<p>STUDENT EVALUATION <i>Description of the evaluation process</i></p> <p><i>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</i></p> <p><i>Please indicate all relevant information about the course assessment and how students are informed</i></p>	<p>Formative</p> <p>In the final evaluation, the following are taken into account:</p> <ul style="list-style-type: none"> • Successful completion of practical training in an organization: 70% • Assignment (compulsory): 30%

5. SUGGESTED BIBLIOGRAPHY

Greek-language bibliography:

- Ιορδανίδου, Α. (1999). Οδηγός της Νεοελληνικής Γλώσσας, α' τόμος. Αθήνα: Πατάκης
- Κόκκινος, Γ., Αλεξάκη Ε. (2002). Διεπιστημονικές προσεγγίσεις στη μουσειακή αγωγή. Αθήνα: Μεταίχμιο.
- Κορρέ, Ει.(2021). Διαφοροποιημένη Παιδαγωγική. Από τη Θεωρία έως τη Διδασκαλία. Αθήνα: Άλκιμο.
- Σέξτου, Π.(2007). Πρακτικές εφαρμογές θεάτρου στην πρωτοβάθμια και δευτεροβάθμια εκπαίδευση. Αθήνα: Καστανιώτης
- Tomlinson, C. A. (2015). Πώς να διαφοροποιήσουμε τη διδασκαλία σε τάξεις μεικτής ικανότητας. Αθήνα: Εκδόσεις Γρηγόρη.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	M. DIMASI
Contact details:	mdimasi@bscc.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Mid-term written examination: 15% Essay (compulsory): 30% Final written examination: 55%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(88) Please write YES or NO

(89) 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.

(90) 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.

8TH SEMESTER

COURSE OUTLINE

NATURAL LANGUAGE PROCESSING (NLP)

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	8 TH
COURSE TITLE	NATURAL LANGUAGE PROCESSING (NLP)		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>																
<p>Upon successful completion of the course, participants will be able to:</p> <ul style="list-style-type: none"> • Apply basic knowledge of Python and use it for natural language processing, text processing, data analysis, and visualization. • Utilize essential Python libraries, such as NLTK for text analysis, and packages like Gensim and Stanza for more complex machine learning tasks. • Visualize data using tools such as Matplotlib, Networkx, Seaborn, and Bokeh. • Use NLP tools to conduct research, developing critical thinking and reproducibility. • Analyze text data to address research questions in the humanities. 																
<p>General Skills <i>Name the desirable general skills upon successful completion of the module</i></p> <table border="0"> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td><i>Decision making</i></td> <td><i>Sustainability</i></td> </tr> <tr> <td><i>Autonomous work</i></td> <td><i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i></td> </tr> <tr> <td><i>Teamwork</i></td> <td><i>Critical thinking</i></td> </tr> <tr> <td><i>Working in an international environment</i></td> <td><i>Promoting free, creative and inductive reasoning</i></td> </tr> <tr> <td><i>Working in an interdisciplinary environment</i></td> <td></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>	<i>Decision making</i>	<i>Sustainability</i>	<i>Autonomous work</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>	<i>Teamwork</i>	<i>Critical thinking</i>	<i>Working in an international environment</i>	<i>Promoting free, creative and inductive reasoning</i>	<i>Working in an interdisciplinary environment</i>	
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Production of new research ideas

- Search, analysis and synthesis of data and information,
- ICT Use
- Adaptation to new situations
- Critical thinking
- Promoting free, creative and inductive reasoning
- Working in an interdisciplinary environment
- Project design and management

3. COURSE CONTENT

1. Introduction to NLP

Week 1: Definition and significance of NLP, applications such as chatbots and translation systems, and basic challenges.

2. Basic Linguistic Elements

Week 2: Linguistic levels and their role in NLP.

3. Text Preprocessing and Representation

Week 3: Text preprocessing (tokenization, stop word removal) and tools like NLTK and spaCy.

Week 4: Text representation: Bag of Words and embeddings (Word2Vec, GloVe).

4. Language Models

Week 5: Introduction to language models and n-gram models.

Week 6: Evaluation of language models: complexity and accuracy.

5. Syntactic Parsing

Week 7: The importance of syntactic parsing and Part-of-Speech tagging.

Week 8: Use of tools for computational syntactic analysis.

6. NLP Applications

Week 9: Sentiment analysis and basic classification models.

Week 10: Named Entity Recognition (NER) and how it works.

7. Introduction to Deep Learning for NLP

Week 11: Basics of neural networks and applications in NLP.

Week 12: Advanced word representations and models like Word2Vec.

8. Current Trends

Week 13: Machine translation, comparison with statistical translation, and introduction to models like BERT and GPT.

4. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Classroom lectures • Workshops • Active learning (hands-on learning) – Experiential learning • Collaborative group learning 																
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 																
TEACHING ORGANIZATION <i>The ways and methods of teaching are described in detail.</i> <i>Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study /</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #e6e6e6;"><i>Activity</i></th> <th style="background-color: #e6e6e6;"><i>Workload/semester</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">26</td> </tr> <tr> <td>Workshops</td> <td style="text-align: center;">13</td> </tr> <tr> <td>Essay</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Weekly projects</td> <td style="text-align: center;">38</td> </tr> <tr> <td>Independent study</td> <td style="text-align: center;">40</td> </tr> <tr> <td>Written examination</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">150</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Workload/semester</i>	Lectures	26	Workshops	13	Essay	30	Weekly projects	38	Independent study	40	Written examination	3	Total	150
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<p>creation, project, creation, project. Etc.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</p>	
<p>STUDENT EVALUATION</p> <p>Description of the evaluation process</p> <p>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</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Formative</p> <p>Weekly projects: 40%</p> <p>Essay (compulsory): 30%</p> <p>Final written examination: 30%</p>

5. SUGGESTED BIBLIOGRAPHY

- Briggs, J. (2022). *Natural language processing for semantic search*.
- Clark, C., Fox, S., & Lappin, S. (2010). *The handbook of computational linguistics and natural language processing*. Blackwell Handbooks in Linguistics.
- Jurafsky, D., & Martin, J. H. (2000). *Speech and language processing: An introduction to natural language processing, computational linguistics, and speech recognition*. Prentice-Hall.
- Manning, C. D., & Schütze, H. (1999). *Foundations of statistical natural language processing*. MIT Press.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	XXXXXXXXXX
Contact details:	XXXXXXXXXX
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly projects: 40% Essay (compulsory): 30% Final written examination: 30%
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(91) Please write YES or NO

(92) 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.

(93) 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.

<i>Adaptation to new situations</i>	<i>Sustainability</i>
<i>Decision making</i>	<i>Demonstration of social, professional and moral responsibility and sensitivity to gender issues</i>
<i>Autonomous work</i>	<i>Critical thinking</i>
<i>Teamwork</i>	<i>Promoting free, creative and inductive reasoning</i>
<i>Working in an international environment</i>	
<i>Working in an interdisciplinary environment</i>	
<i>Production of new research ideas</i>	

- Search, analysis and synthesis of data and information,
- Adaptation to new situations
- Autonomous work
- Teamwork
- Working in an interdisciplinary environment
- Production of new research ideas
- Project design and management
- Critical thinking and self-reflection
- Equity and Inclusion
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to Interactive Audiovisual Applications

- **Theory:** Overview of the field of digital exhibitions and cultural events, cutting-edge technologies, digital tools, objectives, and course structure.
- **Workshop:** Introduction to digital tools and platforms, familiarization with the Unity environment.

2. Basic Principles of Designing Interactive Experiences

- **Theory:** Theories of interactive design, user experience (UX/UI), examples from cultural events and exhibitions.
- **Workshop:** Designing a basic interactive experience in the Unity or Unreal Engine environment.

3. Programming Environments Unity or Unreal Engine I

- **Theory:** Introduction to the programming environments Unity or Unreal Engine, basic functions, and interface.
- **Workshop:** Creating a basic scene using Unity or Unreal Engine, setting up interactions.

4. Programming Environments Unity or Unreal Engine II

- **Theory:** Advanced techniques in Unity or Unreal Engine.
- **Workshop:** Integrating 3D models and animation into an interactive scene.

5. Programming Languages for Interactive Applications: C# and Python

- **Theory:** The C# and Python programming languages for interactive applications.
- **Workshop:** Developing basic scripts for interactions in Unity or Unreal Engine.

6. Digital Multimedia Tools: Image and Sound

- **Theory:** Using GIMP and Audacity for multimedia creation and audio editing.
- **Workshop:** Creating multimedia (images and animation) and integrating them into interactive applications.

7. Digital Cultural Content Management Platforms

- **Theory:** Introduction to platforms for managing digital cultural content.
- **Workshop:** Practical usage, creating a digital exhibition.

8. Creating Augmented Reality (AR) I

- **Theory:** Introduction to augmented reality (AR) and tools (Vuforia).
- **Workshop:** Developing a basic AR application, introducing interactions.

9. Creating Virtual Reality (VR) I

- **Theory:** Introduction to virtual reality (VR) and tools (Oculus SDK).
- **Workshop:** Creating a basic VR application, developing virtual worlds and interactions.

10. Creating AR/VR Applications II

- **Theory:** Advanced AR/VR techniques, integrating multimedia and storytelling.
 - **Workshop:** Developing advanced AR/VR applications, incorporating multimedia.
11. **Multimedia Story telling and Digital Exhibitions**
- **Theory:** The theory of multimedia storytelling, combining multimedia and interactive narratives.
 - **Workshop:** Creating multimedia narratives for digital exhibitions.
12. **Evaluating Interactive Experiences and Users**
- **Theory:** Methods for evaluating interactive experiences, adapting UX, aesthetics, and accessibility.
 - **Workshop:** Evaluating and improving an interactive application.
13. **Presentation of Final Projects and Evaluation**
- **Theory:** Presentation and evaluation of students' final projects, feedback.
 - **Workshop:** Final presentation of projects and discussion.

14. LEARNING & TEACHING METHODS - EVALUATION

TEACHING METHOD <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 	
USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	Use of ICT in teaching and communication with students <ul style="list-style-type: none"> • PPT presentations • Use of digital tools and platforms • Teaching material, announcements and communication through the eClass platform • Student study of supplementary material related to course content • Communication with students via email 	
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	Lectures	26
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	Final Project	30
	Weekly Projects / Tests	38
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	Total	150
STUDENT EVALUATION <i>Description of the evaluation process</i> <i>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</i>	Formative Weekly Projects: 40% Assignment (mandatory): 30% Final Exam: 30%	

examination of a patient, Artistic interpretation, Other/Others

Please indicate all relevant information about the course assessment and how students are informed

4. SUGGESTED BIBLIOGRAPHY

- Μπούνια, Α., Καταπότη, Δ. (επιμ.) (2021). Αναδυόμενες τεχνολογίες και πολιτιστική κληρονομιά. Αθήνα: Αλεξάνδρεια.
- Hartson, R., & Pyla, P. (2012). The UX Book: Process and Guidelines for Ensuring a Quality User Experience. Waltham, MA: Morgan Kaufmann.
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- Miller, C. H. (2019). Digital Storytelling: A Creator's Guide to Interactive Entertainment. New York, NY: CRC Press.
- Moniem, M. A. (2016). Mastering Unreal Engine: A Beginner's Guide. Birmingham, UK: Packt Publishing.
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- Parisi, T. (2015). Learning Virtual Reality: Developing Immersive Experiences and Applications for Desktop, Web, and Mobile. Sebastopol, CA: O'Reilly Media.
- Preece, J., Rogers, Y., & Sharp, H. (2015). Interaction Design: Beyond Human-Computer Interaction. Chichester, UK: John Wiley & Sons.
- Schmalstieg, D., & Hollerer, T. (2016). Augmented Reality: Principles and Practice. Boston, MA: Addison-Wesley.
- Vaughan, T. (2014). Multimedia: Making It Work. New York, NY: McGraw-Hill Education.
- Walhimer, M. (2015). Designing Museum Experiences. Lanham, MD: Rowman & Littlefield.
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ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	xxxxxx
Contact details:	xxxxxx
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly Projects: 40% Assignment (mandatory): 30% Final Exam: 30%
Implementation Instructions: (3)	Written assessments and the final exam will be conducted via eClass 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.

(94) Please write YES or NO

(95) 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.

(96) 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.

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

COURSE OUTLINE

MOBILE APPLICATION DEVELOPMENT FOR CULTURAL ENVIRONMENTS

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	8 TH
COURSE TITLE	MOBILE APPLICATION DEVELOPMENT FOR CULTURAL ENVIRONMENTS		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>												
Upon successful completion of the course, participants will be able to: <ul style="list-style-type: none"> • Design and develop mobile applications specifically tailored for cultural environments, • Use modern programming languages and development platforms for mobile devices, • Apply UI/UX techniques to enhance user experience in mobile applications, • Integrate multimedia and AR/VR technologies into interactive applications, • Utilize mobile device sensors effectively, • Manage cultural content and develop applications that promote accessibility and interaction with the audience, • Evaluate contemporary trends and technologies in mobile application development and their integration into cultural environments, recognizing their impact on user experience. 												
General Skills <i>Name the desirable general skills upon successful completion of the module</i>												
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Working in an international environment *Promoting free, creative and inductive reasoning*
Working in an interdisciplinary environment
Production of new research ideas

- Search, analysis and synthesis of data and information,
- Adaptation to new situations
- Autonomous work
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- Working in an interdisciplinary environment
- Production of new research ideas
- Project design and management
- Critical thinking and self-reflection
- Equity and Inclusion
- Demonstration of social, professional and moral responsibility and sensitivity to gender issues
- Promoting free, creative and inductive reasoning

3. COURSE CONTENT

1. Introduction to Interactive Audiovisual Applications

- Overview of the course, objectives, and learning outcomes.
- Designing and developing applications for cultural environments.
- **Workshop:** Introduction to mobile application development environments.

2. Basic Principles of Application Development

- Programming languages and tools for mobile application development.
- **Workshop:** Creation of simple mobile applications.

3. User Interface (UI) Design and User Experience (UX)

- UI/UX design principles and tools.
- **Workshop:** Designing UI/UX prototypes for mobile applications.

4. Hybrid Application Development

- Theoretical introduction to hybrid application development platforms.
- **Workshop:** Creating hybrid applications using relevant tools.

5. Multimedia and Their Integration into Applications

- Integration of images, videos, and audio in mobile applications.
- **Workshop:** Applying multimedia to existing applications.

6. Introduction to Augmented Reality (AR)

- Theoretical introduction to AR principles and development tools.
- **Workshop:** Creating simple AR applications for mobile devices.

7. Cultural Content Management

- Content Management Systems (CMS) and databases.
- **Workshop:** Integrating CMS and databases into mobile applications.

8. Human-Centered Design Principles

- Theory and practice of human-centered design.
- **Workshop:** Analysis and improvement of existing user interfaces based on human-centered design principles.

9. Trends in Mobile Application Development

- Modern trends and technologies in mobile app development.
- **Workshop:** Analysis and evaluation of contemporary cultural content applications.

10. Creating Interactive Applications

- Strategies for creating interactive and accessible applications.
- **Workshop:** Designing and developing interactive features in mobile applications.

11. Prototyping and Testing

- Prototyping and testing processes.
- **Workshop:** Prototype creation and usability testing.

12. Integration of Augmented Reality (AR) in Cultural Environments

- AR applications in cultural environments.
- **Workshop:** Development of a full AR application for a cultural setting.

13. Final Presentation and Feedback

- Final project presentation and feedback.
- **Workshop:** Presentation of completed applications, discussion, and evaluation.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Lectures • Active learning (hands-on learning) - Experiential learning • Collaborative learning 																
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1. Eisenman, B. Learning React Native: Building Native Mobile Apps with JavaScript .O'Reilly
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Media; 1. Edition

2. Hocking, J. (2018).Unity in Action: Multiplatform Game Development in C#. Manning Publications, New York.

3. Phillips, B., Stewart, C. , Hardy, B. , Marsicano M. (2015). Android Programming: The Big Nerd Ranch Guide. Atlanta, GA.

4. Rogers, Y., Sharp, H., &Preece, J. (2011).Interaction Design: Beyond Human-Computer Interaction. Wiley, Chichester.

5. Shneiderman B., Plaisant C., Cohen M., Jacobs St., Elmqvist N. (2023). ΣχεδίασηΔιεπαφήςΧρήστη. ΕκδόσειςΤζιόλα, Θεσσαλονίκη.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	xxxxxx
Contact details:	xxxxxx
Supervisors: (1)	YES
Evaluation methods: (2)	Weekly Projects: 40% Assignment (mandatory): 30% Final Exam: 30%
Implementation Instructions: (3)	Written assessments and the final exam will be conducted via eClass 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.

(97) Please write YES or NO

(98) 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.

(99) 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.

COURSE OUTLINE

INFORMATICS, LAW AND ETHICS IN THE DIGITAL AGE

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	8 TH
COURSE TITLE	INFORMATICS, LAW AND ETHICS IN THE DIGITAL AGE		
TEACHING ACTIVITIES <i>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.</i>	TEACHING HOURS PER WEEK	ECTS CREDITS	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skill Development</i>	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 <i>Please describe the learning outcomes of the course: Knowledge, skills and abilities acquired after the successful completion of the course.</i>								
<p>Upon completion of the course, students will be able to:</p> <ul style="list-style-type: none"> • Understand the basic principles and regulations governing digital technology and the internet. • Comprehend issues related to intellectual property, privacy, and data protection. • Examine ethical issues in computing. • Evaluate ethical dilemmas related to technology use, such as artificial intelligence, surveillance, censorship, and social networks. • Apply theoretical knowledge to practical examples, assessing legal and ethical decisions in cases concerning computing. • Understand the role of international regulations. • Analyze the international dimension of legislation and regulatory frameworks in the information society, including European Union regulations. • Develop critical thinking about the relationship between technology, law, and society. 								
<p>General Skills <i>Name the desirable general skills upon successful completion of the module</i></p> <table> <tr> <td><i>Search, analysis and synthesis of data and information,</i></td> <td><i>Project design and management</i></td> </tr> <tr> <td><i>ICT Use</i></td> <td><i>Equity and Inclusion</i></td> </tr> <tr> <td><i>Adaptation to new situations</i></td> <td><i>Respect for the natural environment</i></td> </tr> <tr> <td></td> <td><i>Sustainability</i></td> </tr> </table>	<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>	<i>ICT Use</i>	<i>Equity and Inclusion</i>	<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>		<i>Sustainability</i>
<i>Search, analysis and synthesis of data and information,</i>	<i>Project design and management</i>							
<i>ICT Use</i>	<i>Equity and Inclusion</i>							
<i>Adaptation to new situations</i>	<i>Respect for the natural environment</i>							
	<i>Sustainability</i>							

Decision making Autonomous work Teamwork Working in an international environment Working in an interdisciplinary environment Production of new research ideas	Demonstration of social, professional and moral responsibility and sensitivity to gender issues Critical thinking Promoting free, creative and inductive reasoning
<ul style="list-style-type: none"> • Search, analysis and synthesis of data and information, • ICT Use • Autonomous work • Teamwork • Equity and Inclusion • Demonstration of social, professional and moral responsibility and sensitivity to gender issues • Promoting free, creative and inductive reasoning 	

3. COURSE CONTENT

1. Introduction to Intellectual Property Law - Intangible Goods - Copyright - Trademark - Distinctive Signs - Domain Names - Patents - Design: Basic Principles, Powers, Limits of Protection.
2. Copyright (I) - Subject Matter of Protection - Subject of Rights - Categories of Works.
3. Copyright (II) - Economic Rights - Moral Rights - Powers - Limits of Protection of the Right - Exceptions and Limitations.
4. Intellectual Property Organization and Committee for the Enforcement of Copyright and Related Rights Violations on the Internet.
5. Sui Generis Right on Databases.
6. Advertising Filtering Software and the Law of Intangible Goods.
7. Issues of Copyright Law in the Digital Single Market - Data Mining - Hyperlinks - Liability of Service Providers in the Information Society.
8. Artificial Intelligence as Cutting-Edge Technology - Acquiring Knowledge and Extracting Data through AI.
9. Technological Aspects of AI - Machine Learning and Its Applications/Intelligent Systems.
10. Legal Regulation of AI at the European Union Law Level - Emerging Ethical Issues and Their Addressing.
11. Privacy and Personal Data in the Digital Age - Informational Self-Determination of the Individual and Conflict with Other Constitutional Rights - Institutional Framework.
12. Basic Concepts - Principles of Personal Data Processing - Consent of the Data Subject for Their Processing - Legal Bases for Data Processing.
13. Obligations of the Data Controller and Processor - The Data Protection Officer and Their Obligations - Rights of the Data Subject.

4. LEARNING & TEACHING METHODS - EVALUATION

<p>TEACHING METHOD <i>Face to face, Distance learning, etc.</i></p>	<ul style="list-style-type: none"> • Classroom lectures • Workshops • Active learning (hands-on learning) – Experiential learning • Collaborative learning
<p>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT) <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i></p>	<ul style="list-style-type: none"> • Use of ICT in Teaching and Communication with Students • PPT presentations • Use of digital tools and platforms • Teaching materials, announcements, and communication via the eClass platform • Student study of supporting materials related to the course content • Communication with students via email

<p>TEACHING ORGANIZATION</p> <p>The ways and methods of teaching are described in detail.</p> <p>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.</p> <p>The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</p>	<p>Activity</p>	<p>Workload/semester</p>
	Lectures	39
	Seminar Attendance	3
	Educational Visit	3
	Independent Study, Progress Tracking, Exam Preparation, Self-assessment Exercises, Interactive Activities	102
	Final Exam	3
Total	150	
<p>STUDENT EVALUATION</p> <p>Description of the evaluation process</p> <p>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</p> <p>Please indicate all relevant information about the course assessment and how students are informed</p>	<p>Written Examination (100%)</p> <p>Alternatively (optional):</p> <p>Written Individual Assignment (worth 30% of the final grade)</p>	

5. SUGGESTED BIBLIOGRAPHY

- Καλλινίκου, Δ., 2021, Πνευματική ιδιοκτησία (Copyright Law), Π. Ν. Σάκκουλας.
- Κοτσίρης, Λ., 2017, Πνευματική ιδιοκτησία και το κοινοτικό κεκτημένο (Copyright Law and acquiscommunitaire), Σάκκουλα.
- Rosati, E., 2021, Copyright in the digital single market: Article by article commentary to the provisions of Directive 2019/790, Oxford University Press.
- Walter, M., & Lewinski, S. von (Eds), 2010, European Copyright Law: A commentary, Oxford University Press.
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- Mittelstadt, B., Allo, P., Taddeo, M., Wachter, S., and Floridi, L., 2016, The ethics of algorithms: Mapping the debate, *Big data & society* 3(2)

- Floridi, L., 2023, The ethics of artificial intelligence: Principles, challenges and opportunities, Oxford University Press.
- White Paper on Artificial Intelligence: A European approach to excellence and trust, February 2020, European Commission, https://commission.europa.eu/publications/white-paper-artificial-intelligence-european-approach-excellence-and-trust_en.
- Βλαχάβας, Ι., Κεφαλάς, Π., Βασιλειάδης, Ν., Κόκκορας, Φ., & Σακελλαρίου, Η., 2020, Τεχνητή νοημοσύνη, Εκδόσεις Πανεπιστημίου Μακεδονίας.
- Μήτρου, Λ. (Επιμ.), 2023, Μπορεί ο αλγόριθμος... να είναι ηθικός, να είναι δίκαιος, να είναι διαφανής, να δικάζει & να διοικεί;, Πανεπιστημιακές Εκδόσεις Κρήτης.
- Milossi, M., Alexandropoulou, E., & Psannis, K., 2021, AI ethics: Algorithmic determinism or selfdetermination?, *IEEE Access* 9, 58455-58466.
- Μήτρου, Λ. *Η Δημοσιότητα της Κύρωσης ή Η Κύρωση της Δημοσιότητας*, Αθήνα: Σάκκουλας, 2012.
- Μήτρου, Λ. *Ο Γενικός Κανονισμός Προστασίας Προσωπικών Δεδομένων Νέο δίκαιο - νέες υποχρεώσεις - νέα δικαιώματα (Σειρά: Δίκαιο και Κοινωνία στον 21ο Αιώνα)*, Αθήνα, Θεσσαλονίκη: Σάκκουλας, 2017.
- Κανελλοπούλου-Μπότη, Μ. *Πληροφοριακός αυτοκαθορισμός και προσωπικά δεδομένα : μερικές παρατηρήσεις μετά την πρώτη δεκαπενταετία εφαρμογής του νόμου : με αφορμή το παράδειγμα των ιατρικών φακέλων*, Χρονικά Ιδιωτικού Δικαίου 8 (2012): 561-565.

ANNEX OF THE COURSE OUTLINE

Alternative ways of examining a course in emergency situations

Teacher (full name):	G. BABETAS
Contact details:	gbampeta@law.duth.gr
Supervisors: (1)	YES
Evaluation methods: (2)	Written Examination (100%)
Implementation Instructions: (3)	The written exams (both mid-term and final) 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.

(100) Please write YES or NO

(101) 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.

(102) 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.