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**	4TH
COURSE TITLE	DIGITIZATION OF CULTURAL CONTENT: TECHNOLOGIES AND PRACTICAL APPLICATIONS (DIGITAL TOOLS)		

TEACHING ACTIVITIES *If the ECTS Credits are distributed in distinct parts of the course e.g. lectures, labs etc. If the ECTS Credits are awarded to the whole course, then please indicate the teaching hours per week and the corresponding ECTS Credits.*	**TEACHING HOURS PER WEEK**	**ECTS CREDITS**
	3	6
Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.		

COURSE TYPE *Background, General Knowledge, Scientific Area, Skill Development*	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 and interactive experiences.
- 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.

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

- Search, analysis and synthesis of data and information, 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	**Introduction to Digitization of Cultural Content** 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.
2	**Technological Advances in Digitization** 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.
3	**Digitization of Images, Texts, Audio, and Audiovisual Archives** 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.
4	**Advanced Digitization Methods** Advanced methods such as [H]-RTI, MSI, XRF, XPCT. **Workshop**: Application of advanced methods to cultural content.
5	**Development of Digital Archives for Educational Purposes** Introduction to creating educational digital resources. 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

<table>
<tr><td>TEACHING METHOD
Face to face, Distance learning, etc.</td><td>• Face-to-face/Lectures
• Differentiated instruction
• Online communication for guidance and feedback during lesson plan development
• Laboratory teaching/applications</td></tr>
<tr><td>USE OF INFORMATION & COMMUNICATIONS TECHNOLOGY (ICT)
Use of ICT in Teaching, in Laboratory Education, in Communication with students</td><td>Use of ICT in
– teaching
– laboratory training
– communication with students</td></tr>
<tr><td>TEACHING ORGANIZATION
The ways and methods of teaching are described in detail.
Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research & analysis, Tutoring, Internship (Placement), Clinical Exercise, Art Workshop, Interactive learning, Study visits, Study / creation, project, creation, project. Etc.

The supervised and unsupervised workload per activity is indicated here, so that total workload per semester complies to ECTS standards.</td><td>
<table>
<tr><th>Activity</th><th>Workload/semester</th></tr>
<tr><td>Lectures</td><td>26</td></tr>
<tr><td>Workshops</td><td>13</td></tr>
<tr><td>Final project</td><td>37</td></tr>
<tr><td>Weekly projects / Quizzes</td><td>46</td></tr>
<tr><td>Independent study</td><td>55</td></tr>
<tr><td>Final Examinations</td><td>3</td></tr>
<tr><td>Total</td><td>180</td></tr>
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<tr><td>STUDENT EVALUATION
Description of the evaluation process

Assessment Language, Assessment Methods, Formative or Concluding, Multiple Choice Test, Short Answer Questions, Essay Development Questions, Problem Solving, Written Assignment, Essay / Report, Oral Exam, Presentation in audience, Laboratory Report, Clinical examination of a patient, Artistic interpretation, Other/Others</td><td>Formative Assessment
Weekly Projects: 40%
Assignment (mandatory): 30%
Final Examinations: 30%</td></tr>
</table>

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

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*, 2η 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 Περιεχομένο.

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.

(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.