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 *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:	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:

1. Understand the Theory and Fundamental Principles of Databases and Their Importance in the Cultural Sector.
   - 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.
   - 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.
   - 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.
   - 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.
   - Ensure data protection and establish interoperable systems, allowing secure and standardized access to cultural information across different platforms and organizations.

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

- 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

TEACHING METHOD	• Classroom lectures • Workshops

<table>
<tr><td>Face to face, Distance learning, etc.</td><td>• Active learning (hands-on learning) – Experiential learning
• Collaborative group learning</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 and communication with students
• 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</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>Essay</td><td>30</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></table></td></tr>
<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

Please indicate all relevant information about the course assessment and how students are informed</td><td>Formative

Weekly projects: 40%
Essay (compulsory): 30%
Final written examination: 30%</td></tr>
</table>

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):	XXXXXXXXX
Contact details:	XXXXXXXXX
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.

(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.