

## COURSE OUTLINE

### WEB APPLICATIONS DEVELOPMENT FOR CULTURAL AND ARTISTIC ORGANIZATIONS

#### 1. GENERAL

<b>SCHOOL</b>	CLASSICS AND HUMANITIES		
<b>DEPARTMENT/UPS</b>	HUMANITIES / DIGITAL APPLICATIONS IN ARTS AND CULTURE		
<b>LEVEL OF STUDIES</b>	UNDERGRADUATE – LEVEL 6		
<b>COURSE CODE</b>	XXXXX	<b>SEMESTER</b>	6 <sup>TH</sup>
<b>COURSE TITLE</b>	WEB APPLICATIONS DEVELOPMENT FOR CULTURAL AND ARTISTIC ORGANIZATIONS		
<b>TEACHING ACTIVITIES</b> <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>	<b>TEACHING HOURS PER WEEK</b>	<b>ECTS CREDITS</b>	
	3	5	
<i>Please, add lines if necessary. Teaching methods and organization of the course are described in section 4.</i>			
<b>COURSE TYPE</b> <i>Background, General Knowledge, Scientific Area, Skill Development</i>	SCIENTIFIC AREA		
<b>PREREQUISITES:</b>	NO		
<b>TEACHING &amp; EXAMINATION LANGUAGE:</b>	GREEK		
<b>COURSE OFFERED TO ERASMUS STUDENTS:</b>	YES		
<b>COURSE URL:</b>	<a href="https://eclass.duth.gr/courses/XXXXXX/">https://eclass.duth.gr/courses/XXXXXX/</a>		

#### 2. LEARNING OUTCOMES

<b>Learning Outcomes</b> <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"> <li>• Know about web technologies, such as client-server architecture, front-end, and back-end technologies.</li> <li>• Design and develop user-friendly web interfaces using HTML, CSS, and JavaScript, tailored for cultural and artistic organisations.</li> <li>• Using programming libraries and frameworks to add interactivity to web applications.</li> <li>• Develop back-end applications using databases and server-side programming.</li> <li>• Create and manage dynamic web applications, including digital exhibitions and online catalogues, to support the operations of cultural institutions.</li> <li>• 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.</li> <li>• Implement online application security policies to protect the integrity and confidentiality of user data in online cultural services.</li> <li>• Evaluate online applications developed for cultural and artistic organisations and identify best practices.</li> </ul>	
<b>General Skills</b> <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>	

*Production of new research ideas*

- Search, analysis and synthesis of data and information, ICT Use
- Autonomous work
- Teamwork
- Promoting free, creative and inductive reasoning
- Production of new research ideas
- Working in an interdisciplinary environment

### 3. COURSE CONTENT

1. Overview of web technologies
2. Basic web languages (HTML and CSS)
3. Introduction to JavaScript
4. Principles of web design
5. Basic principles for web content accessibility
6. Application frameworks for front-end development
7. Server-side programming
8. Online databases
9. Web services and communication protocols
10. Application frameworks for back-end development
11. Content management systems for cultural organisations
12. Platforms for developing digital repositories of cultural content
13. Security of online applications and user data

### 4. LEARNING & TEACHING METHODS - EVALUATION

<b>TEACHING METHOD</b> <i>Face to face, Distance learning, etc.</i>	<ul style="list-style-type: none"> <li>• Lectures</li> <li>• Active learning (hands-on learning) - Experiential learning</li> <li>• Collaborative learning</li> </ul>	
<b>USE OF INFORMATION &amp; COMMUNICATIONS TECHNOLOGY (ICT)</b> <i>Use of ICT in Teaching, in Laboratory Education, in Communication with students</i>	<ul style="list-style-type: none"> <li>• Digital assessment tools</li> <li>• Online collaboration tools</li> <li>• Use of ICT in teaching and communication with students</li> <li>• PPT presentations</li> <li>• Teaching material, announcements and communication through the eClass platform</li> <li>• Communication with students via email</li> </ul>	
<b>TEACHING ORGANIZATION</b> <i>The ways and methods of teaching are described in detail. Lectures, Seminars, Laboratory Exercise, Field Exercise, Bibliographic research &amp; 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>	<b>Activity</b>	<b>Workload/semester</b>
	Lectures	26
	Laboratory Exercise	13
	Essay	30
	Projects	38
	Study and analysis of bibliography	40
	Written examination	3
	<b>Total</b>	<b>150</b>
<b>STUDENT EVALUATION</b> <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>  <i>Please indicate all relevant information about the course assessment and how students are</i>	Formative Essay (compulsory): 50% Final written examination: 50%	

## 5. SUGGESTED BIBLIOGRAPHY

- 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

## ANNEX OF THE COURSE OUTLINE

### Alternative ways of examining a course in emergency situations

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

(1) Please write YES or NO

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

➤ *written assignment* or/and exercises

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

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

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

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

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

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