

## COURSE DESCRIPTION

### 1. GENERAL

<b>SCHOOL</b>	MUSIC AND AUDIOVISUAL ARTS		
<b>DEPARTMENT</b>	AUDIO AND VISUAL ARTS		
<b>LEVEL</b>	Undergraduate		
<b>COURSE CODE</b>	TEC410	<b>SEMESTER</b>	4 <sup>th</sup>
<b>COURSE TITLE</b>	Dynamic Web Applications		
<b>INDEPENDENT TEACHING ACTIVITIES</b>	<b>WEEKLY TEACHING HOURS</b>	<b>ECTS</b>	
Lab Lecture, Tutorial	3	5	
<b>COURSE CATEGORY</b>	Specific Background		
<b>COURSE TYPE</b>	Elective		
<b>PREREQUISITES</b>	(TEC311), TEC410		
<b>LANGUAGE OF TEACHING and EXAMINATIONS</b>	Greek		
<b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b>	YES (In English)		
<b>URL</b>	<a href="https://avarts.ionio.gr/en/studies/undergraduate/courses-descriptions/tec410/">https://avarts.ionio.gr/en/studies/undergraduate/courses-descriptions/tec410/</a>		
<b>ECLASS</b>			

### 2. TEACHING RESULTS

<b>Teaching Results</b>
After completing the course, students should be familiar to the development and management of dynamic Web applications. Also they should be able to design and implement a dynamic digital content management application using open source software packages, such as content management systems.
<b>General Skills</b>
<ul style="list-style-type: none"> <li>• Seek, analyze and synthesize data</li> <li>• Autonomous work</li> <li>• Team work</li> <li>• Project design and management</li> <li>• Freedom of thought</li> </ul>

### 3. CONTENT

The Internet expansion and especially the extensive post content on the Web have stimulated the development of technologies for creating dynamic applications that enable the implementation of complex interactive environments and easy content management. Advanced applications, such as content management platforms, distance education digital systems, and social networking sites are included, among others, in the wide range of dynamic Internet applications that have a direct impact on the ways of content publication and distribution. In the course, PHP language for creating applications is taught, and insights into the MySQL database management system for storing and retrieving content are provided, the main educational objective being the capacity for developing, managing and evaluating dynamic applications that run in the Web environment.

1st Week: Introductory lesson

2nd Week: Introduction to PHP

3rd Week: Programming in PHP

4th Week: Create Dynamic Web Sites

5th Week: Introduction to SQL

6th Week: PHP & Database  
 7th Week: Content Management Systems  
 8th Week: Advanced SQL & MySQL  
 9th Week: Errors  
 10th Week: Programming Techniques  
 11th Week: Web Application Developing  
 12th Week: Working Sessions and Technical Security  
 13th Week: Course Overview

#### 4. TEACHING AND LEARNING METHODS - EVALUATION

<b>TEACHING METHOD</b>	Lectures												
<b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b>	Enhanced by multimedia content. The learning process is supported by the asynchronous e-learning platform e-class.												
<b>TEACHING STRUCTURE</b>	<table border="0"> <tr> <td>Activity</td> <td style="text-align: right;">Semester Workload</td> </tr> <tr> <td>Lab Lectures</td> <td style="text-align: right;">26</td> </tr> <tr> <td>Tutoring Lectures</td> <td style="text-align: right;">13</td> </tr> <tr> <td>Literature Study and Analysis</td> <td style="text-align: right;">56</td> </tr> <tr> <td>Practice and Preparation</td> <td style="text-align: right;">30</td> </tr> <tr> <td><b>Course Total (ECTS: 5)</b></td> <td style="text-align: right;"><b>125</b></td> </tr> </table>	Activity	Semester Workload	Lab Lectures	26	Tutoring Lectures	13	Literature Study and Analysis	56	Practice and Preparation	30	<b>Course Total (ECTS: 5)</b>	<b>125</b>
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<b>Course Total (ECTS: 5)</b>	<b>125</b>												
<b>EVALUATION OF STUDENTS</b>	<ul style="list-style-type: none"> <li>• Final exams 65%</li> <li>• Individual Project 35% [dynamic application development]</li> </ul>												

#### 5. BIBLIOGRAPHY

Ullman Larry (2009) Introduction to PHP 6 & MYSQL 5. Athens: Klidarithmos.  
 Welling Luke & Thomson Laura (2005) Web Application Development with PHP and MySQL. Athens: Giourdas.