

COURSE SYLLABUS

Languages and New Technologies For The Web

2122-3-E2004P043

Learning area

STUDY OF THE MEANS BY WHICH COMMUNICATION TAKES PLACE

Learning objectives

Knowledge and understanding

- Basic principles of mobile web design
- Responsive web design
- Mobile web visual design principles
- Knowledge of the server-client model and web protocols
- Usability principles for mobile devices
- Content Management System (CMS)

Applying knowledge and understanding

- Advanced web design programming for mobile device
- Advanced programming for responsive web pages

- Application of User Centered Design principles for mobile interfaces

Contents

During classes, students will be presented with basic web design principles for mobile devices, such as smartphones and tablets, through the use of the most up-to-date web development technologies.

During the course, principles of user interaction with particular reference to mobile technologies will also be described.

Further, aspects of client server interaction will be presented through the adoption of a specific CMS (Wordpress).

Detailed program

- Responsive web design
- Mobile User experience
- Advanced HTML 5 and CSS 3
- Bootstrap CSS framework
- Basic usage of Javascript code
- Client-web server interaction
- Content management system (CMS; Wordpress)
- Adobe Dreamweaver

Prerequisites

Basic knowledge of HTML and CSS, Adobe Photoshop or XD

Students are advised to have attended the course of Visual Design and Web design

Teaching methods

Teaching methods include the use of lectures, classroom discussions and practical exercises.

Step by step illustration of HTML 5 and CSS 3 coding adopting Adobe Dreamweaver.

All course material (e.g., slides, HTML, CSS and JS code examples) are made available on the e-learning website of the course, so that also non-attending students can use it.

Taking classes is highly recommended.

Lessons will be held in presence, unless further COVID-19-related restrictions are imposed.

Assessment methods

Two ongoing project reviews are planned during the course (mid-course and at the end of the course) aimed at supporting the students during the design process of their project. The reviews are mandatory for attending students and optional for non-attending students.

The final exam includes a written test (30 minutes) and the development of a project. Both the project and the written test are mandatory for all students.

The written exam is aimed at ascertaining the effective acquisition of theoretical and practical aspects discussed during class. It is composed of 15 multiple choices or filling the missing word questions.

The questions intend to verify the acquisition of knowledge related to the design processes for mobile interfaces, and aspects related to web programming techniques.

Finally, the group project (HTML / CSS with Bootstrap and Javascript website developed by max 2-3 students) aims at assessing the achieved level for HTML, CSS and programming languages.

Students will be also asked to perform a brief oral presentation of their project.

International students (Erasmus) can take the exam in English

The modality of the exam will be updated in accordance with the rules for COVID-19 emergency.

Textbooks and Reading Materials

- Responsive web design. Ethan Marcotte. A book Apart ed.
- Bootstrap official documentation -> <https://getbootstrap.com/docs/4.6/getting-started/introduction/>

- HTML 5 official documentation -> https://www.w3schools.com/html/html5_intro.asp
 - CSS 3 official documentation -> <https://www.w3schools.com/Css/>
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