

## COURSE SYLLABUS

### Languages and New Technologies For The Web

2021-3-E2004P043

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#### Learning area

1: 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

Students should 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.

## **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 (45 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 and CSS programming languages.

Optionally, students can also discuss the presented project orally.

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/4.4/getting-started/introduction/>

HTML 5 official documentation -> [https://www.w3schools.com/html/html5\\_intro.asp](https://www.w3schools.com/html/html5_intro.asp)

CSS 3 official documentation -> <https://www.w3schools.com/Css/>

*Other information will be published on the e-learning page of the course.*

