

## 25837 - Multimedia communication

### Información del Plan Docente

Academic Year	2017/18
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	271 - Bachelor's Degree in Industrial Design and Product Development Engineering
ECTS	5.0
Year	
Semester	Second Four-month period
Subject Type	Optional
Module	---

### **1.General information**

#### **1.1.Introduction**

#### **1.2.Recommendations to take this course**

#### **1.3.Context and importance of this course in the degree**

#### **1.4.Activities and key dates**

### **2.Learning goals**

#### **2.1.Learning goals**

#### **2.2.Importance of learning goals**

### **3.Aims of the course and competences**

#### **3.1.Aims of the course**

#### **3.2.Competences**

### **4.Assessment (1st and 2nd call)**

#### **4.1.Assessment tasks (description of tasks, marking system and assessment criteria)**

### **5.Methodology, learning tasks, syllabus and resources**

#### **5.1.Methodological overview**

This course deals with three important ways of using multimedia as communication technology: multimedia products, websites, and mobile apps. Fundamental concepts, technologies, and quality criteria are the goal of theory classes, organized as lectures, whereas learning of related software tools is the aim of computer lab sessions.

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### 5.2.Learning tasks

1. **Theory Sessions.** 25 on-site hours
  - The methodology applied is based on lectures, because support materials will be available in advance and students can prepare the classes
2. **Problem-solving sessions.** 5 on-site hours
  - There are 2 sessions based on case study analysis of finished digital products
  - Students are divided into small groups and do a report of proposed activity for about an hour
  - After that, each group presents its report, and then the ideas raised are discussed
3. **Computer lab sessions.** 20 on-site hours
  - The first session is dedicated to basic learning of a website creation software tool
  - Each of remaining sessions are dedicated to learning a concrete technology and its application to a website which is described in the instructions of practice sessions
4. **Individual or Group work.** 0,5 on-site hours and 60 off-site hours
  - The work consists in creating a medium-complexity website and a mobile app
  - If the student choose continuous assessment, work must be individual; otherwise it is in pairs
  - This activity has scheduled support of face-to-face tutorials to advice and guidance in pre-established dates, but only for students who choose **continuous assessment**

### 5.3.Syllabus

#### Theory Syllabus

1. Overview of Multimedia
2. Fundamentals of Internet and World Wide Web
3. Web Technologies and Standards
  - HTML and CSS
  - JavaScript and DOM
  - Frameworks: jQuery
  - Server-side Languages
  - CMS: WordPress
4. Web Design
  - Planning
  - Usability
  - Architecture
  - Exploration
  - Implementation
  - Optimization
5. Mobile Apps
6. Databases
7. Media Criteria
8. Multimedia Products

#### Practice Syllabus

1. Introduction to Dreamweaver
2. Website Creation
3. Web Forms
4. JavaScript
5. jQuery
6. Responsive Web Design
7. WordPress
8. Mobile App Creation
9. Web and Databases (I)
10. Web and Databases (II)

### 5.4.Course planning and calendar

The course is estimated to take 125 hours of student effort.

- 50,5 on-site hours
  - o 25 theory hours: 12 two-hour sessions and 1 one-hour session. First 13 weeks

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- o 20 computer lab hours: 10 two-hour sessions. Weeks 2 to 11
- o 5 problem-solving hours: 2 two-and-a-half-hour sessions. Weeks 12 and 13
- o 0,5 face-to-face tutorial hour: Tutorial support of individual work
  - 74,5 off-site hours
- o Study hours, works and exams

Detailed information will be provided on the first day of class.

### 5.5. Bibliography and recommended resources

<b>BC</b>	Niederst Robbins, Jennifer. Diseño web : guía de referencia / Jennifer Niederst Robbins Madrid : Anaya Multimedia, cop. 2007
<b>BC</b>	Nielsen, Jakob. Usabilidad / Jakob Nielsen y Hoa Loranger Madrid : Anaya Multimedia, 2007
<b>BC</b>	Bou Bauzá, Guillem. El guión multimedia. Edición 2003 / Guillem Bou Bauzá . Madrid : Anaya Multimedia D.L. 2002
<b>BC</b>	Krug, Steve . No me hagas pensar: actualización / Krug, Steve Anaya Multimedia, 2015
<b>BC</b>	Lynch, Patrick J.. Web style guide : basic design principles for creating Web sites / Patrick J. Lynch, Sarah Horton . - 3rd. ed. New Haven [etc.] : Yale University Press, cop. 2008
<b>BC</b>	Powell, Thomas A.. Diseño de sitios Web : manual de referencia / Thomas A. Powell ; traducción Luis Rodríguez Martín, Jorge Rodríguez Vega ; revisión técnica Antonio Vaquero Sánchez . - 1a. ed. en español Madrid : Osborne, McGraw-Hill, 2001