

# WEB RESOURCES AND MOBILE TECHNOLOGIES

Coordination: AGOST MORE, JORDI

Academic year 2022-23

# Subject's general information

Subject name	WEB RESOURCES AND MOBILE TECHNOLOGIES						
Code	14286						
Semester	1st Q(SEMESTER) CONTINUED EVALUATION						
Typology	Degree		Course	Character	Modality		
	Master's Degree in Social Media Marketing		1	COMPULSORY	Blended learning		
Course number of credits (ECTS)	6						
Type of activity, credits, and groups	Activity type	PRAULA		TEORIA			
	Number of credits	3.5		2.5			
	Number of groups	1		1			
Coordination	AGOST MORE, JORDI						
Department	COMPUTER SCIENCE AND INDUSTRIAL ENGINEERING						
Teaching load distribution between lectures and independent student work	3 times: applied study cases in classroom  1. project presentation						
Important information on data processing	Consult this link for more information.						
Language	English - Spanish						

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
AGOST MORE, JORDI	jordi.agost@udl.cat	6	

#### Learning objectives

With the subject Web Resources and Mobile Technologies, students are expected to achieve the following objectives:

Differentiate between WWW and Internet

Understand the evolution of the WWW and what technologically mean its evolutions

Know what SEO is.

Understand that it is used in this optimization.

Know the algorithms, analytics and ranking factors in SEO.

Know and understand that it is IoT

To be able to understand that it is Open Data and Big Data

Know which type of display is suitable for each type of data

Be able to understand the principles of design on the web

### Competences

#### Core

CB1 Possess and understand knowledge that provides a basis or opportunity for originality in the development and/or application of ideas, often in a research context.

CB2 To be able to apply acquired knowledge and have problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.

CB3 Being able to integrate knowledge and face the complexity of formulating judgements on the basis of incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of the knowledge acquired. ethical responsibilities linked to the application of their knowledge and judgements.

CB4 Knowing how to communicate their conclusions - and the knowledge and reasons that and reasons for them - to specialist and non-specialist audiences in a clear and unambiguous way in a clear and unambiguous manner. CB5 Possessing the learning skills that will enable them to continue studying in a way that will study in a way that will be largely self-directed or autonomous. autonomous

#### General

GC1 Analyse and synthesise ideas, data and contents

GC2 Organise and plan resources and people

GC3 Teamwork and leadership

GC4 Reason and evaluate critically

GC5 Quality assurance

GC6 Work and learn autonomously

GC7 Apply knowledge to practice

GC8 Make strategic decisions that take into account specific economic, cultural, social and political economic, cultural, social and political conditions.

GC9 Be able to express oneself correctly in oral and written form.

GC10 Mastering a foreign language

GC11 Have a good command of ICT

GC12 Respect fundamental rights

#### **Specific**

SC1 Effectively implement technological tools to develop social media marketing projects. develop social media marketing projects.

SC3 Generate information systems from online environments and social networks to obtain specialised knowledge. networks to obtain specialised knowledge.

SC5 Use tactics and techniques for the participation and dynamization of virtual communities.

SC8 Distinguishing, designing, implementing and evaluating advanced methods of information analysis in social media marketing. information analysis in social media marketing.

#### Subject contents

PART 1 WWW vs Internet

TOPIC 1 Definition of the Internet

- 1. Brief history of the Internet and the WWW
- 2. Evolution of the WWW: Web 2.0, Web 3.0, Web 4.0, Web 5.0
- 3. Tourism resources and products

TOPIC 2 SEO (Search Engine Optimisation)

- 1. Introduction to SEO
- 2. Problems with the different SEO techniques
- 3. Rules
- 4. Popularity and relevance
- 5. Ranking factors
- 6. Algorithms
- 7. Analytics
- 8. Rich Snippets

PART 2. Data on the WWW

#### THEME 3. IoT (Internet of Things)

- 1. Sensors
- 2. Types of data
- 3. Consolidation of knowledge in data

#### THEME 4. Data formats

- 1. Open Data
- 2. Big Data

#### TOPIC 5. Data visualisation

- 1. What?
- 2. Where?
- 3. When?
- 4. Scales

#### PART 3 HOW TO BECOME A DESIGNER WITHOUT BEING A DESIGNER

#### THEME 6 Colour

- 1. Colour theory
- 2. Colour psychology
- 3. Attributes of colour

#### THEME 7. Typography

- 1. Typographic families
- 2. Characteristics of fonts

#### **TOPIC 8. Templates**

- 1. Responsive Design/App
- 2 Hybrid app

# Methodology

Dates	Description	Activity	HTP (2)	Autonomous	HTNP (3)
(Weeks)	Description	In classroom	(Hours)	Activity	(Hours)
1-2-3-4	Stage 1: WWW vs Internet.	Case study	4	Exercises and study	30
5-6-7-8	Bloque 2: SEO techniques	Case study	4	Exercises and study	30
9-10-11- 12	Bloque 3: Graphic Design Approach	Case study	4	Exercises and study	30
13-14-15- 16	Project development	Consulting	4	Study Case Study	40
16	Evaluation	Project Presentations	4		

## Development plan

Work periods of 4 weeks will be established, where students will have to complete the study of articles at the end of this period. In addition, they must have performed exercises that will be delivered at the end of that period. Thus during 3 periods. Each period counts 20% of the final grade. In the last period of 4 weeks a project will be carried out that will aim to put into practice the knowledge acquired. This project will be done in a group. Account 40% of the final grade.

#### Evaluation

60% Exercises in every stage. There are 3 stages. Every stage exercises counts 20% of the final result.

40% An individual project must be delivered taking into account all the contents.

A rubric will be facilitated to know the avaluation project criteria.

# **Bibliography**

- Börner, K. E.Polley, D., Visual Insights. A Practical Guide to Making Sense of Data. The MIT Press. 2014•
- McCandless, D., The Visual Miscellaneum. A Colorful guide to the world's most consequential Trivia.
   Collins Design 2009
- Heller, E., Psicología del Color. Editorial Gustavo Gili, SL 2006