Universitat de Lleida

DEGREE CURRICULUM

WEB TECHNOLOGIES

Coordination: TEIXIDÓ CAIROL, MERCÈ

Academic year 2020-21

WEB TECHNOLOGIES 2020-21

Subject's general information

Subject name	WEB TECHNOLOGIES
Code	102176
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION
Typology	

Degree	Course	Character	Modality
Bachelor's Degree in Design and Creative Tecnologies	1	COMMON	Attendance-based

Course number of credits (ECTS)	6
Type of activity, credits, and groups	

Activity type	PRALAB	TEORIA
Number of credits	3	3
Number of groups	2	1

Coordination	TEIXIDÓ CAIROL, MERCÈ
Department	COMPUTER SCIENCE AND INDUSTRIAL ENGINEERING
Important information on data processing	Consult this link for more information.
Language	The classes will be done in catalan

WEB TECHNOLOGIES 2020-21

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
TEIXIDÓ CAIROL, MERCÈ	merce.teixido@udl.cat	9	

Learning objectives

The objectives of the course are:

- Be able to get to know basic concepts related to Information and Communication Technologies. (ICT)
- Be able to identify the main characteristics and the basic components of the computers and the main devices.
- Be able to identify the main characteristics of the operating systems and the software applications.
- Be able to know the parameters of configuration more important of the networks of communication.
- Be able to configure and use different basic services of Internet.
- Be able to develop students' autonomy in using Information and Communication Technologies.
- Aprender las técnicas básicas de desarrollo de pequeñas aplicaciones hipermedia.
- Identificar y analizar los aspectos relacionados con el análisis y diseño de pequeñas aplicaciones hipermedia.

Competences

Basic and transversal competences:

- CB1. Show an ability to dominate the concepts in its area of study. It goes from general secondary education, based in advanced books, but also in some aspects, that involves knowledge of the current and new fields of study.
- CT3. Acquire a significant proficiency in the use of the new technologies and in the Information and Communication Technologies. (ICT)

General competences:

- CG1. Skill to create and develop answers to problems of communication for the different digital contents.
- CG4. Apply the concepts and own methods of the digital technologies.
- CG10. Use tools and digital means in its professional development.

Specific competences:

- CE9.Get to know the methodologies, programs, technical, rules and standard. Moreover, be able to use the base of knowledge purchased with specific elements of development web.

Subject contents

WEB TECHNOLOGIES 2020-21

Part 1: INFORMATION IN THE WEB

TOPIC 1: Structure of the information in the web

1. Information and contents in the web vs in paper
    - Advantages and problems of each support
2. Hypertext
3. Multimedia
4. Interaction
5. customer- server model
6. Systems of management of projects in the web (Trello, Sharepoint, Google Drive, Dropbox)

TOPIC 2: Presentation of the information in the web:

1. Semantic web
2. HTML Language
    - Characteristics of the language
    - Labels in HTML
    - Accessibility
    - Standards in HTML
    - Styles (CSS)
    - Templates
3. Information managers
    - Information structure
    - Information query
    - Information applications

PART 2: WEB DESIGN

TOPIC 3: Model of development in the web

1. Agents of contents
    - Utility
    - Market content managers
    - Installing and using a Content Manager (Wordpress)

Methodology

Students are expected to attend classes regularly, to do the exercises and to contribute with their answers, doubts, opinions, etc. to the development of the classes.
All students are expected to attend to 3 hours classes with the whole group and 3 hours with split group.
The sessions with split group will be carried out in the laboratory.

Whole group: Theory and Problems Classes (3 credits)

- Theoretical part: supported classes with digital information and/or with notes.
- Practical application part: work of application of concepts more practical.

Split groups: Laboratory Classes (3 credits)

- Conducted Classes and personalised monitoring for practical groups.

Development plan

Week	Description	Attendance activity WG (Whole group)
1st	Structure of the information in the web	web vs paper, hipertext and multimedia
3rd	Structure of the information in the web	Interaction, Customer-server model server, project management in the web
5th	Presentation of the information in the web	HTML language
6th	Presentation of the information in the web	Style sheet
8th	Presentation of the information in the web	Style sheet / Application of web templates
9th		Mid Term Exam
10th	Presentation of the information in the web	Information management
12th	Model of development in the web	Content management systems, Explanation and installation
13th	Model of development in the web	Content management systems
14th	Model of development in the web	Content management systems
16-17th	Final exam	Final exam
19th	Resitting exam	Resitting exam

Evaluation

Acronym	Activities of Evaluation	Grade %	Mininum note	In grup	Compulsary	Recoverable
EX1	Exercise 1	15%		YES(<=4)	YES	NO
PRA1	Practice 1	20%		YES(<=2)	YES	NO
P1	1st exam or practice	20%	4	NO	YES	YES
PRA2	Practice 2	25%		YES(<=2)	YES	NO
P2	2nd exam or practice	20%	4	NO	YES	YES
All students are expected to sit for and have a grade above 4 in the exams (P1 and P2) in order to be able to pass the course. However, the final grade must be >=5.						
Final note = 0,15*EX1 + 0,20*PRA1 + 0,20*P1 + 0,25*PRA2 + 0,20*P2						

Bibliography

Webgraphy:

W3C: https://www.w3c.es

Templates: https://templated.co/

XPATH Tester: https://www.freeformatter.com/xpath-tester.html

XSLT Tester: https://www.freeformatter.com/xsl-transformer.html

Bibliography:

- MacDonald, M., Creación y diseño Web. Edición 2016. Editorial ANAYA, 2015
- Gauchat, J.D., El gran libro de HTML5, CSS3 y JavaScript 3ª Edición, Ediciones técnicas Marcombo, 2019
- Aubry, C., HTML5 Y CSS3: PARA SITIOS CON DISEÑO WEB RESPONSIVE. Editorial ENI, 2014
- Lopez, M., Programación Web en Entorno Servidor. Editorial Ra-Ma, 2016
- Lopez, M., Sanchez, D., Programación Web en Entorno Cliente. Editorial Ra-Ma, 2016