Universida_{de}Vigo

IDENTIFYING DATA

Web Development Technologies

Subject	Web Development Technologies
Code	V05M145V01309
Study programme	Telecommunication Engineering

Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	2nd	1st

Teaching language	Spanish
Department	
Coordinator	Rodríguez Pérez, Miguel
Lecturers	Rodríguez Pérez, Miguel
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General description	Description of the most current techniques applications for the development of Web applications. The course will tech the students to develop multiplatform applications based on the HTML5 foundation.

Competencies

Code	
A1	CB1 Knowledge and understanding needed to provide a basis or opportunity for being original in developing and/or applying ideas, often within a research context.
A5	CB5 Students must have learning skills to allow themselves to continue studying in largely self-directed or autonomous way
B12	CG12 Skills for lifelong, self-directed and autonomous learning.
C35	CE50/OP20 Ability to deploy and manage server software application logic of a web service managers, to design and manage non-relational data bases , and understand the functional division of an existing Web application between the client and the server itself

Learning outcomes

Expected results from this subject	Training and Learning Results
The students will be able to design, develop and manage the whole infrastructure of a web application. Besides, they will be able to develop the application logic and to create responsive user interfaces using web technologies.	A1 A5 B12 C35

Contents

Topic	
Web applications architecture	
HTML5: A tagged language in permanent evolution	Introduction to the WHATWG
	New HTML tags
	Semantic Markup
	Forms
	New APIs

Content presentation: CSS3	A new box model
	Responsive design
	New CSS modules and standardization process
	Images and gradients
	New selectors
Web applications	The javascript language
	Web applications frameworks

Planning

	Class hours	Hours outside the classroom	Total hours
Master Session	9	18	27
Laboratory practises	9	18	27
Autonomous practices through ICT	5	64	69
Long answer tests and development	2	0	2

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

	Description
Master Session	Presentation of the main concepts treated in the subject, and description of the technologies employed. The presentation will be based, most of the time, practical examples. Most work will be focused on the competence CE35.
Laboratory practises	In the labs the students will face several practical sessions ⬚supervised by the professors⬚ where they will settle the concepts learnt in the theoretical classes. The work will be focused in competencies CB5 and CE35.
Autonomous practices through ICT	A project with a fairly large magnitude will be posed to be developed as a teamwork during all the semester. The work will focus on competencies CB1, CB5, CG12 and CE35.

Personalized attention

Methodologies	Description
Master Session	During the hours of tutoring, teachers will conduct a personalized attention, either individually to strengthen or guide the student na understanding of theoretical concepts explained in the sessions demonstrative lectures or practical sessions. In these hours also monitoring associated with the project of a certain size to be undertaken with colleagues work is done. In the group tutorials solutions raised by the group are discussed and reviewed the uniform participation of members in the final development.
Autonomous practices through ICT	During the hours of tutoring, teachers will conduct a personalized attention, either individually to strengthen or guide the student na understanding of theoretical concepts explained in the sessions demonstrative lectures or practical sessions. In these hours also monitoring associated with the project of a certain size to be undertaken with colleagues work is done. In the group tutorials solutions raised by the group are discussed and reviewed the uniform participation of members in the final development.

Assessment

	Description	Qualification	Training and Learning Results		
Autonomous practices through ICT	Implementation of a small demonstration of a web application with the technologies exposed in the subject.	50	A1 A5	B12	C35
Long answer tests and development	Final exam.	50	A5	B12	C35

Other comments on the Evaluation

Continuous evaluation:

To opt to the continuous evaluation, it is necessary to attend at least to 80% of the practical laboratory sessions and produce the partial deliveries of the group project.

Each delivery will be evaluated individually, being the total mark of the practice the result to ponder 50% of the note

obtained in the last delivery with the average of the previous deliveries. Each mark will be shared by all the members of the group.

The final mark of the subject will be the pondered average among the practical mark (50%) and the mark of the final exam (50%).

Final evaluation:

The students that prefer the final evaluation will have to indicate so to the professor before the date of the first partial delivery of the group project. In such case, his partial deliveries will not be taken into account for his mark, (although they are taken into consideration for those group members that had chosen the continuous evaluation). The final mark will be 50% of the mark obtained in the final delivery of the work and 50% of the final exam mark.

Second evaluation:

In the extraordinary evaluation students will be requested make some small modifications to the group project individually. For those students that had chosen final evaluation, this delivery will represent 50% of the final mark while the remaining 50% corresponds with a new final exam.
In the case of the students of continuous evaluation, the mark of the practice will be the largest of: 50% of the new delivery and the previous partial deliveries (50%) or 100% of the new delivery.

Sources of information

Basic Bibliography

Mark Pilgrim, **HTML5: Up and Running**, 1ª, O'Reilly, 2010

https://developer.mozilla.org/en/docs/Web, **Web technology for developers**,

Wesley Hales, **HTML5 and JavaScript Web Apps**, 1ª, O'Reilly, 2012

Complementary Bibliography

Peter Gasston, **The book of CSS3**, 2ª, No Starch Press, 2014

Recommendations