



IDENTIFYING DATA

(*)Tecnoloxías para o Desenvolvemento Web

Subject	(*)Tecnoloxías para o Desenvolvemento Web			
Code	V05M145V01309			
Study programme	(*)Máster Universitario en Enxeñaría de Telecomunicación			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	5	Optional	2nd	1st
Teaching language	Spanish			
Department				
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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 teach the students to develop multiplatform applications based on the HTML5 foundation.			

Competencies

Code	
A1	CB1 The 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 To have 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, comprising even the object server and the database. 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	New HTML tags New APIs
Web applications	The javascript language Javascript frameworks: AngularJS
Content presentation: CSS3	A new box model Responsive design

Planning			
	Class hours	Hours outside the classroom	Total hours
Master Session	10	0	10
Laboratory practises	8	0	8
Presentations / exhibitions	2	5	7
Tutored works	5	0	5
Autonomous practices through ICT	0	95	95

*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.
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.
Presentations / exhibitions	Students will prepare a public presentation of the work carried out during the autonomous practices
Tutored works	A project with a fairly large magnitude will be posed to be developed as a teamwork during all the semester. This work will be supervised by the professors with periodic weekly meetings.
Autonomous practices through ICT	A project with a fairly large magnitude will be posed to be developed as a teamwork during all the semester.

Personalized attention

Methodologies	Description
Autonomous practices through ICT	During tutoring time, the professors will be able to help the students either individually in the understanding of the theoretical concepts explained in the master sessions and/or in the demonstrative lab activities. In this works, the teacher will check the progress of the group task. There will also be discussions about the different solutions proposed by the group members and the share of the workload among the group members will also be checked.
Tutored works	During tutoring time, the professors will be able to help the students either individually in the understanding of the theoretical concepts explained in the master sessions and/or in the demonstrative lab activities. In this works, the teacher will check the progress of the group task. There will also be discussions about the different solutions proposed by the group members and the share of the workload among the group members will also be checked.

Assessment

	Description	Qualification	Training and Learning Results
Presentations / exhibitions	The students will have to expose in an oral proof the work realized of autonomous way. Of the clarity of this exhibition and of the answers that can give to the questions that formulate him the professors, depends 20% of the note.	20	B12
Autonomous practices through ICT	The group project will determine the greater part of the final qualification. The value of the note will depend of the correction of the solution presented by the group, of the report that accompanies it, of the implication of the student in the development of the same and of the quantity of technologies presented in the subject employed in practice.	80	A1 B12 C35 A5

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 (80%) and the note of the exhibition of the work (20%), that will be individually evaluated.

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 80% of the mark obtained in the final delivery of the work and 20% of the exhibition.

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 80% of the final mark while the remaining 20% corresponds with the individual presentation.

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. The remaining 20% corresponds with the exhibition of the work.

Sources of information

HTML5: Up and Running, **Mark Pilgrim**, 1^a,

Learning AngularJS, **Ken Williamson**, 1^a,

The book of CSS3, **Peter Gasston**, 2^a,

Smashing Node.js: JavaScript Everywhere, **Guillermo Rauch**, 2^a,

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

MongoDB: The Definitive Guide, **Kristina Chodorow**, 2^a,

Recommendations