

BASIC DETAILS:

Subject:	LENGUAJES Y ESTÁNDARES EN LA WEB		
Id.:	30556		
Programme:	GRADUADO EN INGENIERÍA INFORMÁTICA (SEMIPRESENCIAL). 2008 (BOE 15/12/2008)		
Module:	TECNOLOGÍAS WEB		
Subject type:	OPTATIVA		
Year:	3	Teaching period:	Primer Cuatrimestre
Credits:	3	Total hours:	75
Classroom activities:	12	Individual study:	63
Main teaching language:	Castellano	Secondary teaching language:	Castellano
Lecturer:	NOVOA MINGUEZ, RAUL (T)	Email:	rnova@usj.es

PRESENTATION:

The main goal in this subject is that students learn & practice with web design standards and that they can understand the benefits of working with them.

Web design has grown in the last years. Web design content has evolved undergoing a standardization process with the purpose of differentiating format and content of the web pages. This allows adding new functionalities and promoting the compatibility of the content between the web browsers used by the users.

PROFESSIONAL COMPETENCES ACQUIRED IN THE SUBJECT:

General programme competences	G02	Innovative capacity to propose and find new and efficient ways to undertake any task and/ or function within the professional environment - highly motivated by quality.
	G05	Capacity to adapt to different environments while being positive and optimistic, orienting your behaviour towards the achievement of goals.
Specific programme competences	E13	Capacity to identify, assess and use current and emerging technologies, considering how they apply in terms of individual or organisational needs.
	E20	Capacity to undertake the detailed design of the components of a project (procedures, user interface, equipment characteristics, communications system parameters, etc.).
Learning outcomes	R01	Understand the concept of standards, current specifications and the development process for them.
	R02	Present and plan a Web site.
	R03	Develop a Web site using the languages considered standard.

PRE-REQUISITES:

Basic knowledge in HTML and programming.

SUBJECT PROGRAMME:

Subject contents:

1 - Introduction to web design based on standards
1.1 - What's a standard?
1.2 - Design elements
1.3 - Benefits of the use of standards
2 - Introduction to standarization
2.1 - Definition
2.2 - Process
2.3 - W3C
2.4 - Validation
3 - Web design
4 - HTML
4.1 - Introduction
4.2 - Elements
4.3 - Examples

5 - CSS
5.1 - Introduction
5.2 - CSS 3.0
5.3 - Responsive design
6 - Javascript - typescript
6.1 - Introduction
6.2 - Types
6.3 - Objects, functions, arrays
6.4 - Scope
6.5 - Closures
6.6 - Classes, Inheritance
6.7 - Good practices
7 - Web framework

Subject planning could be modified due unforeseen circumstances (group performance, availability of resources, changes to academic calendar etc.) and should not, therefore, be considered to be definitive.

TEACHING AND LEARNING METHODOLOGIES AND ACTIVITIES:

Teaching and learning methodologies and activities applied:

Day by day the student must compose his portfolio of the subject. It include lectures summary and solved exercises. According to the previous paragraph calendar, several exercises will be proposed and its solutions will be discussed some time later. The solutions of everyday exercises will be included in the portfolio and sent to the PDU when they are required. The lecturer will upload his lectures notes on the PDU (Plataforma Docente Universitaria). Self-learning: after class, students have to finish the task has left uncompleted in class or do remain ones. All task must be uploaded to PDU in the time ordered. Students are recommended to consult the lecturer by e-mail.

At the end of the term students must pass a test. It could be composed of some questions, exercises, or oral presentation.

Student work load:

Teaching mode	Teaching methods	Estimated hours
Classroom activities	Master classes	7
	Practical exercises	2
	Practical work, exercises, problem-solving etc.	0,5
	Assessment activities	2,5
Individual study	Tutorials	3
	Individual study	10
	Individual coursework preparation	17
	Group cousework preparation	17
	Project work	9
	Research work	5
	Compulsory reading	2
Total hours:		75

ASSESSMENT SCHEME:

Calculation of final mark:

Written tests:	50 %
Individual coursework:	20 %
Group coursework:	30 %
TOTAL	100 %

*Las observaciones específicas sobre el sistema de evaluación serán comunicadas por escrito a los alumnos al inicio de la materia.

BIBLIOGRAPHY AND DOCUMENTATION:

Basic bibliography:

Andy Budd, Cameron Moll, Simon Collison .CSS Mastery: Advanced Web Standards Solutions. ISBN 9781590596142
David Flanagan. JavaScript: The Definitive Guide: Activate Your Web Pages. ISBN: 978-0596805524
Goodman, Danny. JavaScript y DHTML. ISBN: 978-84-415-2388-3
Ruse, Kevin. Web Standards Design Guide. ISBN 9781584503873

Recommended bibliography:

Chuck Easttom. Advanced JavaScript, ISBN: 9781598220339
Negrino, Tom. Java Script. ISBN: 9788420546469

Recommended websites:

Dive into HTML	http://diveintohtml5.info/index.html
Reference HTML, CSS, JavaScript	http://reference.sitepoint.com/css
W3 Consortium	http://www.w3.org
W3 schools	http://www.w3schools.com