BASIC DETAILS:

Subject:	PROGRAMACIÓN AVANZADA PARA INTERNET		
Id.:	30084		
Programme:	GRADUADO EN INGENIERÍA INFORMÁTICA. PLAN 2008 (BOE 15/12/2008)		
Module:	TECNOLOGIAS WEB		
Subject type:	OPTATIVA		
Year:	3	**Teaching period:**	Primer Cuatrimestre
Credits:	3	**Total hours:**	75
Classroom activities:	33	**Individual study:**	42
Main teaching language:	Inglés	**Secondary teaching language:**	Castellano
Lecturer:		**Email:**	

PRESENTATION:

The main goal of this subject is to be able to plan and develop a web site that includes the interface and user interaction, and the exchange of information between the client and the Web server.

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.
	G10	Critical and analytical capacity when assessing information, data and courses of action.
	G13	Capacity to use individual learning strategies aimed at continuous improvement in professional life and to begin further studies independently.
Specific programme competences	E03	Capacity to recognise the technical principles and apply the appropriate practical methods satisfactorily to analyse and solve engineering problems.
	E09	Capacity to maintain professional competences through independent learning and continuous improvement.
	E20	Capacity to undertake the detailed design of the components of a project (procedures, user interface, equipment characteristics, communications system parameters, etc.).
	E22	Capacity to undertake implementation tasks which require a high degree of technical awareness in different spheres (programming, configuration of hardware and communications equipment, etc.).
Learning outcomes	R01	Develop a Web site using advanced Web programming languages.
	R02	Plan and monitor a Web site development project.

PRE-REQUISITES:

Knowledge of any high-level programming language (C, Java, ...).
Understanding of object-oriented programming.
It is recommended to have knowledge of HTML, CSS and Javascript.

SUBJECT PROGRAMME:

Subject contents:

1 - Introduction
1.1 - The World Wide Web
1.2 - Overview of HTML and CSS
2 - Web Servers
2.1 - Introduction
2.2 - Architecture
2.3 - Installation and configuration of a web server (Apache)
2.4 - Publication of web sites
2.5 - Other web servers, comparison

3 - Server Languages
3.1 - Introduction
3.2 - MVC pattern
3.3 - PHP
3.4 - Case study
3.5 - Other server languages, comparison
4 - Databases
4.1 - Introduction
4.2 - Configuration in web server
4.3 - Database access from server languages

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:

This course will use the following methodologies in order to give the students the best opportunity to develop their competences: lectures, practical cases, exercises and cousework presentations.

Participation in class will be accounted in the final score. All readings, practices and works will be announced using the Online University Platform (PDU).

Student work load:

Teaching mode	Teaching methods	Estimated hours
Classroom activities	Master classes	25
	Practical exercises	4
	Coursework presentations	2
	Assessment activities	2
Individual study	Individual study	5
	Individual coursework preparation	31
	Compulsory reading	3
	Other individual study activities	3
	Total hours:	75

ASSESSMENT SCHEME:

Calculation of final mark:

Written tests:	15	%
Individual coursework:	80	%
Participation:	5	%
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:

PDU documents

Recommended bibliography:

BEIGHLEY, Lynn and MORRISON, Michael. Head First PHP and MySQL. O'REILLY, 2009.
LOPEZ, Antonio. Learning PHP 7. Packt Publishing, 2016.
NIXON, Robin. Learning PHP, MySQL and JavaScript (5th edition). O'REILLY, 2018.

Recommended websites:

Apache Server Documentation	http://httpd.apache.org/docs/2.4/en/
PHP Manual	https://www.php.net/manual/en/index.php
XAMPP	https://www.apachefriends.org

* Guía Docente sujeta a modificaciones