BASIC DETAILS:

Subject:	ADMINISTRACIÓN DE SERVIDORES
Id.:	30069
Programme:	GRADUADO EN INGENIERÍA INFORMÁTICA. PLAN 2008 (BOE 15/12/2008)
Module:	DISEÑO Y ADMINISTRACION DE SISTEMAS Y SERVICIOS
Subject type:	OBLIGATORIA

Year:	3	**Teaching period:**	Segundo Cuatrimestre
Credits:	6	**Total hours:**	150
Classroom activities:	65	**Individual study:**	85
Main teaching language:	Inglés	**Secondary teaching language:**	Castellano
Lecturer:		**Email:**	

PRESENTATION:

Theoretical and practical subject about high level "client-server" services. This subject put focus on learning how some of the most important internet services work and how they can be installed, setup and managed in Linux servers.

PROFESSIONAL COMPETENCES ACQUIRED IN THE SUBJECT:

General programme competences	G06	Capacity to analyse and find a solution to complex problems or unforeseen situations which may arise while working in any type of socio-economic organisation.
	G08	Ability to communicate effectively about different matters in a variety of professional situations and with the different media available.
	G09	Capacity to make decisions impartially and rationally.
	G10	Critical and analytical capacity when assessing information, data and courses of action.
	G14	Capacity for abstraction to handle various complex knowledge models and apply them to examining and solving problems.
Specific programme competences	E11	Capacity to remain up-to-date in the technological and business worlds in the area of information and communication technologies.
	E12	Capacity to manage complexity through abstraction, modelling, 'best practices', patterns, standards and the use of the appropriate tools.
	E13	Capacity to identify, assess and use current and emerging technologies, considering how they apply in terms of individual or organisational needs.
	E17	Capacity to identify and analyse user needs with the intention of designing effective, usable IT solutions which can be incorporated into the user's operating environment.
	E18	Capacity to identify and define the requirements to be satisfied by IT systems to cover the stated needs of organisations or individuals.
	E19	Capacity to design and define the architecture of IT systems (software, hardware and communications) under the requirements agreed upon by the parties involved.
	E21	Capacity to perform tests that verify the validity of the project (functional, data integrity, performance of the computer applications, equipment, communications, 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.).
	E23	Capacity to design and implement security policies in order to preserve the integrity of the operational environment.
Learning outcomes	R01	Know the theoretical features of server architecture.
	R02	Understand high level network protocols.
	R03	Install, configure and use different servers.
	R04	Perform basic server administration tasks.

PRE-REQUISITES:

Students should have previous knowledged about Operative Systems and Operative Systems Management

SUBJECT PROGRAMME:

Subject contents:

1 - Name Server (DNS)
1.1 - TCP/IP. Introduction and revision
1.2 - Client-Server Models
1.3 - DNS Server (bind)
2 - FTP and Samba
2.1 - File Transfers
2.2 - FTP Server (ProFTPD)
2.3 - File Server (Samba)
3 - HTTP Services
3.1 - Introduction to HTTP services
3.2 - APACHE HTTP Server
4 - Directory Services
4.1 - Introduction to Directory Services
4.2 - OpenLDAP Directory Server

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:

Each type of session, work and activities are designed for the development of the competences that the student must acquire in the subject.

Next scheme summarizes the most important recommendations to the students:

- Read the presentations before attending the theoretical sessions (PDU available in advance)
- Attendance at theory sessions in a participatory way
- Complement the topics covered in these sessions with information offered in the bibliography
- Use, at any time, tutorship sessiones to resolve any doubt or problem
- Development of the practices according to the established criteria:
  - Do not delay the development
  - Try to resolve any problem with your classmates via subject's forum in the PDU

Student work load:

Teaching mode	Teaching methods	Estimated hours
Classroom activities	Master classes	20
	Other theory activities	2
	Practical exercises	12
	Practical work, exercises, problem-solving etc.	20
	Debates	3
	Coursework presentations	4
	Assessment activities	4
Individual study	Tutorials	2
	Individual study	30

	Individual coursework preparation	31
	Group cousework preparation	8
	Research work	5
	Compulsory reading	5
	Recommended reading	4
	Total hours:	150

ASSESSMENT SCHEME:

Calculation of final mark:

Written tests:	50	%
Individual coursework:	30	%
Group coursework:	15	%
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:

Lars Wirzenius, Joanna Oja, Stephen Stafford,Alex Weeks. The Linux System Administrator's Guide Version 0.9
Rich Bowen, Ken Coar. Apache Cookbook: Solutions and Examples for Apache Administration 3rd Edition

Recommended bibliography:

Ben Laurie, Peter Laurie. Apache: The Definitive Guide (3rd Edition)

Recommended websites:

Documentación Apache	http://httpd.apache.org/docs/
Documentación BIND	https://kb.isc.org/article/AA-01031
Documentación OpenLDAD	http://www.openldap.org/doc/
Documentación ProFTPD	http://www.proftpd.org/docs/
Documentación Samba	http://www.samba.org/samba/docs/
Ubuntu bind9 server how-to	https://help.ubuntu.com/community/BIND9ServerHowto

* Guía Docente sujeta a modificaciones