WEB PUBLISHING AND ADMINISTRATION

Code: 322089

Main Scientific Area: Information and computer systems

Lecturer: José Manuel Viamontes Martins

Language of Instruction: Portuguese

Regime: S2

Contact Hours: 60h Total Workload: 90h

ECTS: 6,0

Objectives

In this UC students must master the installation and configuration of different operating systems, manage Webservers and administer Web Daemons that allow better management of access and communications. They shouldalso manage and configure user access, using shared network resources, analyze weblogs, as well as installdifferent services (ftp, mail servers). Another objective of this unit is the security of data access, so in this unitstudents will learn how to access and respond to customer requests, defining, implementing and managing Websecurity policies.

Learning Outcomes

1. Understand the basic concepts of computer networks.

2. Install, configure and understand the advantages of Active Directory.

3. Know and implement protocols and solutions to authenticate, authorize, register and account.

4. Plan and implement safety procedures.

5. Plan, implement and manage network servers.

6. Make and use back up of security data and files of servers.

7. Understand licensing policies, provide support and maintenance.

Course Contents

1- General approach of networking and systems

1.1 Challenges of networking administration

1.2 Networkinfrastructures

1.2.1 Network technologies

2 – Introduction to Active Directory

2.1 Group Work

2.2 Domain

2.3Organisational units

2.4 Trees

2.5 Forests

2.6 Management of users

2.7 Installation and setting of the ActiveDirectory

3 – Protocols and solutions to authentication, authorization, register and accountability

3.1 AAA Protocols

3.2 Authentication credentials

3.3 Register of user activity

4 – Safety procedures

4.1 Threats

4.2 Safecommunication

4.3 Firewalls

4.3.1 Firewall Iptables installation and setting

4.3.2 Tables e Chains

4.3.3 Assessmentof rules / laws and policies

5 - WWW server and Email

5.1 Installation and setting

6 - Backup and restore

7 -Policies of licensing, support and maintenance

Recommended Bibliography

1. Administração de Redes Informáticas, Fernando Boavida ,Mário Bernardes, Pedro Vapi, FCA.

2. Engenharia de Redes Informáticas, Edmundo Monteiro, Fernando Boavida, FCA.

3. Integrated Management of Networked Systems, Heinz-Gerd Hegerind, Sebastian Abeck, Bernhard Neumair,Morgan Kaufmann Publishers.

Learning and Teaching Methods

One of the objectives of the Web Publishing and Administration Course is to know the general aspects of

networkand system administration. In this sense the first chapter introduces the basic concepts about web serveradministration. It is also intended that students master the installation of different operating systems, so will beused operating systems in Windows and Linux environments, both on Web servers and on e-mail servers. This willbe approached from the second chapter. The unit also aims to install, configure and administer WWW and E-mailservers, as well as implement security mechanisms and procedures. Topics covered in chapters three, four andfive. This unit also aims at safety. This topic will be covered in more detail in chapter four. Finally, students areexpected to be able to schedule automatic backups as well as use them for any data recovery needs, which will becovered in chapter six.

Assessment Methods

Assessment by 1 written test and a practical work with report and presentation The test will have a 40% weight on the final grade and practical work 60%. The test is compulsory, with a minimum mark of 7 values on a scale of 0 to 20. Students not approved in the continuous evaluation may carry out a resource exam, containing elements of the theoretical component.