

Dublin Institute of Technology

Pre-Requisite Modules code(s)	Co-Requisite Modules code(s)	ECTS Credits	Module Code	Module Title
		5		Open source software in the Enterprise
		5	OSSW 4601	

OSSW 4601 – Open Source Software in the Enterprise

Module author: Frank Duignan

Module Description:

This module enables students to learn about and use a range of open source software in the setting of a small to medium sized enterprise. They will learn to install and configure a range of internet server applications such as a Web server and a mail server. They will also learn to install and configure intranet tools such as a file server and an authentication server.

Module aim

The aims of this module are:

- To teach the students to install and configure a range of open source software in a commercial setting.
- To expose the students to a range of alternative enterprise software tools
- To demonstrate the use of business productivity applications such as OpenOffice.
- To make the student aware of the maintenance issues involved in enterprise software tools

Learning Outcomes:

On completion of this module, the learner will be able to:

- Install and configure a Unix-like operating system.
- Install, configure and test a web server and a mail server
- Install, configure and test an authentication server and a file server
- Assess the financial implications of software choices.

Learning and Teaching Methods:

The course will be largely based in a laboratory where students will learn to carry out various tasks. Students will be expected to read reference material as part of their self directed learning. Online reference material will be widely used.

Module content:

Installation and initial configuration of a Unix like operating system such as Linux or FreeBSD.
Installation, configuration and testing of a web server such as Apache.
Installation, configuration and testing of a mail server such as Sendmail including spam and virus filtering.
Authentication mechanisms for computer resources.
Installation, configuration and testing of a Samba file server and domain controller.
System maintenance
System costing

Module Assessment

The module will be assessed as follows:

- Assignments: 50%
- Laboratory/practical exercises: 20%
- Examination 30%

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Essential Reading:

Bryan Costales and Eric Allman, 2003, Sendmail, O'Reilly

- Ben Laurie and Peter Laurie, 2003, Apache : The definitive guide, O'Reilly

Supplemental Reading:

- Jelmer Vernooij and John H. Terpstra, 2005, The Official Samba 3: How to and Reference Guide, Prentice Hall
- Marshall Kirk McKusick and George Neville-Neil. 2004, The Design and Implementation of the FreeBSD Operating System, Addison Wesley.
- David Cantrell and Chris Lomens and Michele Membrila, 2005, Slackware Linux Essentials, Walnut Creek.

Web references, journals and other:

- Apache web server documentation: <http://www.apache.org>
- Sendmail documentation: <http://www.sendmail.org>
- Linux documentation: <http://www.tldp.org>
- FreeBSD documentation: <http://www.freebsd.org>
- Samba documentation <http://www.samba.org>

Further Details:

This is a single semester course. Prospective students should have an active interest in computing and system administration. The course will be largely based in a laboratory where students will learn to carry out various tasks. The number of students should therefore be limited to twelve.

Date of Academic Council approval