

## Liverpool John Moores University

Title: INTERNET AND OPEN SOURCE PROGRAMMING  
Status: Definitive  
Code: **6021TECH** (105436)  
Version Start Date: 01-08-2016

Owning School/Faculty: Electronics and Electrical Engineering  
Teaching School/Faculty: Electronics and Electrical Engineering

Team	Leader
Paul Otterson	Y

**Academic Level:** FHEQ6      **Credit Value:** 24      **Total Delivered Hours:** 72  
**Total Learning Hours:** 240      **Private Study:** 168

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Practical	72

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	assignment - submit web function statement with style sheet (group activity)	30	
Essay	AS2	assignment – develop mulitmedia applications and applets within web pages	20	
Essay	AS3	mini-project - students will work in pairs (or individually) designing a web site including all the elements on the course based on LAMP	50	

### Aims

*To provide a general understanding and practical grounding in the use of open*

*source applications and languages as applied to current internet programming techniques.*

## **Learning Outcomes**

After completing the module the student should be able to:

- 1 Write JAVA applets
- 2 Specify the function and look of a web site
- 3 Use internet scripting languages
- 4 Construct downloadable component models
- 5 Develop and link MySql databases using PHP
- 6 Implement a basic Linux O/S and 'Apache' Server configuration

## **Learning Outcomes of Assessments**

The assessment item list is assessed via the learning outcomes listed:

CW	2	3				
CW	1	2	3	4		
CW	1	2	3	4	5	6

## **Outline Syllabus**

*Writing graphical applications/applets using the abstract windows toolkit.*

*Scripting languages: e.g. JAVAScript, VBScript, PHP, SMIL*

*Components: e.g. Active-X, JavaVirtualMachine*

*XML, HTML V4, Style sheets*

*Open Source Applications : LAMP (Linux, Apache, Mysql, PHP)*

## **Learning Activities**

A series of practical sessions with support material supplied from the Internet. Different computing platforms will be used to emphasis the platform independence of the internet.

## **Notes**

This module is designed for students wishing to look into open source programming. There is an expectation that students will have already covered modules in web design, programming, database creation and some general computing.