Liverpool John Moores University

Title: INTERNET AND OPEN SOURCE PROGRAMMING

Status: Definitive

Code: **6504TECYPC** (115870)

Version Start Date: 01-08-2018

Owning School/Faculty: Engineering

Teaching School/Faculty: YPC International College (Kolej Antarabangsa YPC)

| Team | Leader |
|--------------|--------|
| Michael Shaw | |

Academic Credit Total

Level: FHEQ6 Value: 24 Delivered 115

Hours:

Total Private

Learning 240 Study: 125

Hours:

Delivery Options

Course typically offered: Standard Year Long

| Component | Contact Hours |
|-----------|---------------|
| Lecture | 56 |
| Practical | 56 |

Grading Basis: 40 %

Assessment Details

| Category | Short | Description | Weighting | Exam |
|----------|-------------|---------------------------------|-----------|----------|
| | Description | | (%) | Duration |
| Practice | AS1 | Mini project e-commerce website | 30 | |
| Practice | AS2 | Assignment Java application | 20 | |
| Exam | AS3 | Examination | 50 | 3 |

Aims

To provide a comprehensive treatment of current internet programming techniques.

Learning Outcomes

After completing the module the student should be able to:

- 1 Design JAVA applications using an open source language
- 2 Specify and construct an e-commerce web site
- 3 Design using internet scripting languages
- 4 Design and link MySQL databases using PHP
- Appraise and configure Apache' Server 5

Learning Outcomes of Assessments

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

Practical 1 2 4

Practical 2

Exam 3 5

Outline Syllabus

The rationale for JAVA, its development history, the JAVA virtual machine The JAVA language: basic syntax, variable types, looping constructs. Object orientated programming: polymorphism, inheritance, classes, interfaces

Writing a simple website which apply all element of e-commerce.

Scripting languages: e.g. JAVAScript and PHP

Database: e.g. JDBC, MySQL XML, HTML, XHTML, Style sheets

Open Source Applications

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.

| Course Material | Book |
|------------------------|----------------------------|
| Author | J. Murach, R. Harris |
| Publishing Year | 2010 |
| Title | Murach's PHP and MySQL |
| Subtitle | |
| Edition | |
| Publisher | Mike, Murach and Associate |
| ISBN | |

| Course Material | Book |
|------------------------|-------------|
| Author | Larry Ulman |
| Publishing Year | 2011 |

| Title | PHP for Web |
|-----------|--------------------------|
| Subtitle | |
| Edition | 4th ed |
| Publisher | Visual Quick Start Guide |
| ISBN | |

| Course Material | Book |
|------------------------|---|
| Author | S.Reges , M.Stepp |
| Publishing Year | 2011 |
| Title | Building Java Programs, Back To Basics Approach |
| Subtitle | |
| Edition | |
| Publisher | Pearson Education |
| ISBN | |

| Course Material | Book |
|-----------------|----------------------------------|
| Author | Y.D.Liang |
| Publishing Year | 2011 |
| Title | Introduction to Java Programming |
| Subtitle | |
| Edition | 8th ed |
| Publisher | Pearson Education |
| ISBN | |

Notes

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