Liverpool John Moores University

Title:	INTRODUCTION TO INTERNET AND WEB DEVELOPMENT
Status:	Definitive
Code:	**4122COMP** (121504)
Version Start Date:	01-08-2021

Owning School/Faculty:	Computer Science and Mathematics
Teaching School/Faculty:	Computer Science and Mathematics

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Academic Level:	FHEQ4	**Credit Value:**	20	**Total Delivered Hours:**	55
Total Learning Hours:	200	**Private Study:**	145		

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Workshop	55

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	AS1	A developed web application	50	
Report	AS2	A report detailing the development of a web application	50	

Aims

To allow the student to investigate a variety of web development technologies and practice techniques for developing dynamic websites.

Learning Outcomes

After completing the module the student should be able to:

1	Appraise client side technologies on the World Wide Web
2	Describe server side processing on the world Wide Web
3	Create and maintain dynamic web content
4	Develop dynamic web applications to access an appropriate datasource
5	Describe and compare the behaviour of common internet communication protocols

Learning Outcomes of Assessments

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

Web application   3   4

Development Report   1   2   5

Outline Syllabus

Networks, the Internet and World Wide Web
Client and Server communications;
Request-response communication protocols
Web Design
Client-side markup and formatting languages
Web page layout
Client side dynamism techniques
Server side dynamism techniques and programming (e.g. PHP)
Asynchronous web applications
Web security; transport-layer security

Learning Activities

A hands-on laborartory session where the student will develop their own dymamic web applications.

Notes

Increasingly much of the world's software is being run in a web browser. Software offered over the Web provides many sought after benefits in software deployment: ease of implementation, universality and ubiquity of access, and availability of server-side data and services.
This module seeks to endow the student with the necessary knowledge and underpinning technologies to develop for the World Wide Web.
Students will learn techniques and technologies to develop web applications, hosted on a web application server, using a server side programming language to dynamically generate standards compliant markup, driven from a data source, using

design principles which abstract content from aesthetic and utilises client-side dynamism to enhance the user's experience, using industry standard toolsets and web-focused APIs.