

## Liverpool John Moores University

Title: Introduction to Web Development  
Status: Definitive  
Code: **4222COMP** (127978)  
Version Start Date: 01-08-2021

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

Team	Leader
Matt Webster	Y

**Academic Level:** FHEQ4      **Credit Value:** 20      **Total Delivered Hours:** 44  
**Total Learning Hours:** 200      **Private Study:** 156

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Workshop	44

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	A report detailing the development of a web application.	50	
Artefacts	AS2	A developed 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 Evaluate client-side technologies for use in developing a website
- 2 Explain server-side processing in relation the development of a website
- 3 Produce appropriate dynamic content for a website
- 4 Implement dynamic web functionality to access an appropriate data source
- 5 Compare common internet communication protocols used by websites

## Learning Outcomes of Assessments

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

Design of a Web Application	1	2	5
Web Application	3	4	

## 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 laboratory session where the student will develop their own dynamic 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.