

## Summary Information

<b>Module Code</b>	4222COMP
<b>Formal Module Title</b>	Introduction to Web Development
<b>Owning School</b>	Computer Science and Mathematics
<b>Career</b>	Undergraduate
<b>Credits</b>	20
<b>Academic level</b>	FHEQ Level 4
<b>Grading Schema</b>	40

## Module Contacts

### Module Leader

Contact Name	Applies to all offerings	Offerings
Athanasios Zolotas	Yes	N/A

### Module Team Member

Contact Name	Applies to all offerings	Offerings
--------------	--------------------------	-----------

### Partner Module Team

Contact Name	Applies to all offerings	Offerings
--------------	--------------------------	-----------

## Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

## Learning Methods

Learning Method Type	Hours
----------------------	-------

Workshop	44
----------	----

## Module Offering(s)

Offering Code	Location	Start Month	Duration
JAN-CTY	CTY	January	12 Weeks

## Aims and Outcomes

<b>Aims</b>	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:

Code	Description
MLO1	Evaluate client-side technologies for use in developing a website
MLO2	Explain server-side processing in relation the development of a website
MLO3	Produce appropriate dynamic content for a website
MLO4	Implement dynamic web functionality to access an appropriate data source
MLO5	Compare common internet communication protocols used by websites

## Module Content

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

Module Overview
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 you with the necessary knowledge and underpinning technologies to develop for the World Wide Web. You 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 mark-up, driven from a data source. You will use 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 API.

### Additional Information

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.

### Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Design of a Web Application	50	0	MLO1, MLO2, MLO5
Technology	Web Application	50	0	MLO4, MLO3