

Liverpool John Moores University

Title: Networks and Web Development
Status: Definitive
Code: **4202COMP** (127963)
Version Start Date: 01-08-2021

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

Team	Leader
Michael Mackay	Y
Kellyann Stamp	
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Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 46
Total Learning Hours: 200 **Private Study:** 154

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Practical	22

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Website development	50	
Exam	AS2	Examination	50	2

Aims

To introduce students to the most common technologies underlying modern computer networking and communications.

To introduce the basic concepts of internet and web technologies.

To explore the design issues of modern networked applications.

Learning Outcomes

After completing the module the student should be able to:

- 1 Identifying appropriate uses of web client-side technologies.
- 2 Convert user requirements into interactive web pages using modern tools and technologies.
- 3 Identify applications of Network/Internet protocols.
- 4 Describe various features of Computer Networks and the Internet's infrastructure.

Learning Outcomes of Assessments

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

Website development	1	2
Examination	3	4

Outline Syllabus

Basic computer networking concepts
Internetworking: Personal, Local and Wide Area Networks
Internet Service Providers / Broadband / Telecommunications
Network / Internet protocols: TCP / IP/ DNS / HTTP
Technical, social and regulatory challenges in the Internet
Understanding the construction of the World Wide Web
The basics of HTML living standard
Advanced HTML5 features (Video and Canvas)
Cascade Style Sheets (CSS)
Web Browsers and Rendering
Usability & Accessibility
Scripting languages (JavaScript/JQuery)
XML/JSON
Introduction to Web Server Technologies
Social Media Technologies

Learning Activities

Learning activities will be through lectures and practical tutorials where students will be encouraged to ask questions and discuss case studies. The practical tutorials will be based around supported labs where students will be encouraged to put theory gained in lectures and tutorials into practice.

Notes

This module is intended to provide students with an understanding of modern Internet and web technologies. It will present the technologies underlying computer

networking and the applications built on networks. These include interactive Web page design, development and social media technologies.