

Liverpool John Moores University

Title: MOBILE AND WEB DEVELOPMENT
Status: Definitive
Code: **5130COMP** (121884)
Version Start Date: 01-08-2021

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

Team	Leader
Paul Bell	Y

Academic Level: FHEQ5 **Credit Value:** 20 **Total Delivered Hours:** 55
Total Learning Hours: 200 **Private Study:** 145

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	11
Practical	44

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Report on the development of a web application	70	
Artefacts	AS2	A mobile-first, responsive web application	30	

Aims

To provide knowledge of various mobile and web platforms and architectures and gain experience in designing and developing mobile and web applications.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically review mobile-first web application architecture
- 2 Apply enterprise-scale application design methodologies
- 3 Consider frameworks for the design and development of web applications.
- 4 Construct data-driven applications for mobile platforms

Learning Outcomes of Assessments

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

Web application	1	2	3
Responsive web application	3	4	

Outline Syllabus

Desktop vs Mobile-first design

Responsive design

Declarative layout/control frameworks

Database connectivity/SQL-driven web development

Web service connectivity

Thin vs Thick clients

Native mobile development and cross-platform implementations

Logical and Physical Architectures

Learning Activities

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

Notes

This module is intended to provide an overview of developing web applications for mobile platforms. It will illustrate the main platforms available for mobile-focused web development, drawing data from a variety of sources including other web services and databases. The module will conclude with an overview of alternative mobile development techniques; familiarising the student with the fundamentals of native-focused and cross-platform frameworks-focused mobile developments.