

## Liverpool John Moores University

Title: ADVANCED WEB DEVELOPMENT  
Status: Definitive  
Code: **7057COMP** (103316)  
Version Start Date: 01-08-2011

Owning School/Faculty: Computing and Mathematical Sciences  
Teaching School/Faculty: Computing and Mathematical Sciences

Team	Leader
Mike Baskett	Y

**Academic Level:** FHEQ7  
**Credit Value:** 15.00  
**Total Delivered Hours:** 36.00  
**Total Learning Hours:** 150  
**Private Study:** 114

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	12.000
Practical	12.000
Tutorial	12.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	AS1	Individual assessment, including the design of a website for an advanced web development task.	100.0	

### Aims

*To develop an advanced understanding of the theory and practice of building interactive web applications.*

*To provide an in-depth study of the concepts of the technologies that can be used to build interactive web-based applications.*

*To develop practical skills in the use of best practices in developing interactive applications for the web.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Critically review the fundamental technical concepts, design and implementation of an interactive web based application.
- 2 Design and diagnose basic web-based architectures to support a wide range of interactive applications
- 3 Apply creative skills concerning the approaches and practices used to build interactive web applications using modern programming practices.

## Learning Outcomes of Assessments

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

Website design                      1    2    3

## Outline Syllabus

*Adding interactivity to web applications.*

*Rich Internet Applications: Flash technologies*

*Server-side development: Java web technologies, ASP.NET, etc.*

*The .Net framework*

*Database connectivity and applications: SQL, MySQL, ADO.NET, PHP, etc.*

*Web Services: SOAP, etc.*

*Practical E-Commerce and Security.*

*Mobile internet and WML.*

## Learning Activities

Formal lectures will introduce core topics. Laboratory sessions will introduce coding exercises to develop programming skills.

## References

<b>Course Material</b>	Book
<b>Author</b>	Jackson, J.C.
<b>Publishing Year</b>	2007
<b>Title</b>	Web Technologies: A Computer Science Perspective
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Prentice-Hall, Inc.
<b>ISBN</b>	0131856030

<b>Course Material</b>	Book
<b>Author</b>	Deitel, H., Deitel, P.
<b>Publishing Year</b>	2008
<b>Title</b>	Internet & World Wide Web: How to Program
<b>Subtitle</b>	
<b>Edition</b>	4th Edition
<b>Publisher</b>	Prentice Hall
<b>ISBN</b>	0131752421

<b>Course Material</b>	Book
<b>Author</b>	Yuen, P.K., Lau, V.
<b>Publishing Year</b>	2003
<b>Title</b>	Practical Web Technologies
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Addison Wesley
<b>ISBN</b>	0201750767

---

## Notes

This module provides practical experience of building advanced, interactive, modern, web-based applications as well as providing a thorough grounding of theory and technology currently in use.