Liverpool John Moores University

Title: ADVANCED E-TECHNOLOGY WORKSHOP
Status: Definitive
Code: **6030COMP**   (103020)
Version Start Date: 01-08-2011

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

Team	emplid	Leader
Glyn Hughes		Y

Academic Level: FHEQ6 **Credit Value:** 24.00 **Total Delivered Hours:** 72.00

Total Learning Hours: 240 **Private Study:** 168

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24.000
Practical	24.000
Tutorial	24.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Group based design and implementation with individual written component.	100.0	

Aims

To design and develop advanced web systems and connected applications.

Learning Outcomes

After completing the module the student should be able to:

1   Evaluate and apply advanced data manipulation/communication techniques to web based systems / connected applications.
2   Evaluate and apply advanced ASP.NET & AJAX design to web based systems.
3   Implement line-of-business connected applications using modern development techniques and tools across Database, Web and Smart Device tiers.
4   Appreciate the architectural differences between normal APIs and Compact APIs.

Learning Outcomes of Assessments

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

 Report   1   2   3   4

Outline Syllabus

Web Systems Development on the Client vs Server.
The role XHTML, AJAX, JavaScript, JSON, XML & SOAP in the Web Based Systems makeup.
Apply, where appropriate, audio and video techniques for Web Based Systems development.
Apply advanced application development tools and techniques to Connected Applications development.
Database communications and development to support Web Based Systems and Connected Applications.
As a result of the above develop an eCommerce site and a Connected Application for Smart Devices.

Learning Activities

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

References

Course Material	Book
Author	Fox, D.
Publishing Year	2003
Title	Building Solutions with the Microsoft.NET CF: Architecture and Best Practices for Mobile Development
Subtitle	
Edition	
Publisher	Addison Wesley
ISBN	9780321197887

Course Material	Book
Author	MacDonald, M.
Publishing Year	2007
Title	Beginning ASP.NET 3.5 in C# 2008: From Novice to Professional
Subtitle	
Edition	
Publisher	APress
ISBN	9781590598917

Course Material	Book
Author	Kapel, G.
Publishing Year	2006
Title	Web Engineering: The Discipline of Systematic Development of Web Applications
Subtitle	
Edition	
Publisher	John Wiley
ISBN	9780470015544

Notes

This module is designed to build on the knowledge gained by the student in the level two module as well as developing more advanced skills resulting in multi-tier systems development.