**Liverpool** John Moores University

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|---|---|
| Title: | ADVANCED E- TECHNOLOGY WORKSHOP |
| Status: | Definitive |
| Code: | **6011SUMCOM**   (103349) |
| 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 |

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| **Academic Level:** | FHEQ6 | **Credit Value:** | 24.00 | **Total Delivered Hours:** | 72.00 |
| **Total Learning Hours:** | 240 | **Private Study:** | 168 | | |

**Delivery Options**
Course typically offered: Summer

| 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 | ETL report and Rich Internet Application development. | 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:

CW                              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 |
| **Subtitle** | Architecture and Best Practices for Mobile Development |
| **Edition** |  |
| **Publisher** | Addison Wesley |
| **ISBN** | 9780321197887 |

| Course Material | Book |
|---|---|

| Author | MacDonald, M. |
|---|---|
| **Publishing Year** | 2007 |
| **Title** | Beginning ASP.NET 3.5 in C# 2008 |
| **Subtitle** | From Novice to Professional |
| **Edition** | |
| **Publisher** | APress |
| **ISBN** | 9781590598917 |

| Course Material | Book |
|---|---|
| **Author** | Kapel, G. |
| **Publishing Year** | 2006 |
| **Title** | Web Engineering |
| **Subtitle** | The Discipline of Systematic Development of Web Applications |
| **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.