**Liverpool** John Moores University

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|---|---|
| Title: | COMPUTING IN PRACTICE |
| Status: | Definitive |
| Code: | **4005COMP** (115974) |
| Version Start Date: | 01-08-2014 |

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

| Team | emplid | Leader |
|---|---|---|
| Robert Askwith | | Y |
| Mark Allen | | |
| Martin Randles | | |
| Dhiya Al-Jumeily | | |

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| **Academic Level:** | FHEQ4 | **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 |
| Workshop | 24.000 |

**Grading Basis:** 40 %

**Assessment Details**

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|---|---|---|---|---|
| Essay | AS1 | Individual Essay on a development topic | 40.0 | |
| Artefacts | AS2 | Workshop activities that lead to the group construction of a poster. | 60.0 | |

**Aims**

*To introduce the student to a range of development aspects of computing and the*

*associated tools and techniques used in them.*

**Learning Outcomes**

After completing the module the student should be able to:

1       Demonstrate knowledge of a range of development topics in computing.
2       Identify suitable methods for developing solutions to problems in computing.
3       Apply the appropriate tools and techniques to practical aspects of computing.
4       Identify practical solutions to problems in computing.

**Learning Outcomes of Assessments**

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

Individual Essay          1

Poster                    2     3     4

**Outline Syllabus**

*Overview of the Software Development Process*
*Overview of Project Management*
*Gathering Requirements*
*Making Sense of Requirements*
*Producing a Design*
*Common Design and Development Tools*
*Problem Solving: Moving from Design to Implementation*
*Approaches to Testing*
*Report Writing and drawing conclusions*

*Working in cohort groups and teams within those groups, students will select a topic appropriate to their programme and produce a project proposal. The proposal will build on the activities in semester 1 and cover*

*Investigation of the requirements and feasibility of the idea*
*Scheduling the software development*
*Gathering information for the proposal*
*Choosing appropriate development tools*
*Making an outline test plan*

**Learning Activities**

Lectures, tutorial activities and computer lab practical sessions are used to deliver the topics, and students undertake workshop activities to develop their skills.

**References**

| Course Material | Book |
|---|---|
| **Author** | Adams |
| **Publishing Year** | 2010 |
| **Title** | Fundamentals of Game Design |
| **Subtitle** | |
| **Edition** | 2nd |
| **Publisher** | New Riders |
| **ISBN** | 0321643372 |

| Course Material | Book |
|---|---|
| **Author** | Weber, A., |
| **Publishing Year** | 2008 |
| **Title** | Creating your world |
| **Subtitle** | The official guide to advanced content creation for second life |
| **Edition** | |
| **Publisher** | Wiley |
| **ISBN** | |

| Course Material | Book |
|---|---|
| **Author** | Sommerville, I., |
| **Publishing Year** | 2006 |
| **Title** | Software Engineering |
| **Subtitle** | |
| **Edition** | 8th |
| **Publisher** | Addison Wesley |
| **ISBN** | 0321313798 |

| Course Material | Book |
|---|---|
| **Author** | Nelson, B., |
| **Publishing Year** | 2007 |
| **Title** | Guide to Computer Forensics and Investigations |
| **Subtitle** | |
| **Edition** | 3rd |
| **Publisher** | Addison Wesley |
| **ISBN** | 1418067334 |

| Course Material | Book |
|---|---|
| **Author** | Rabin, S., |
| **Publishing Year** | 2005 |
| **Title** | Introduction to Game Development |
| **Subtitle** | |
| **Edition** | |
| **Publisher** | Charles River Media |
| **ISBN** | 1584503777 |

| Course Material | Book |
|---|---|
| **Author** | England, Finney, |
| **Publishing Year** | 2007 |
| **Title** | Managing Interactive Media |
| **Subtitle** | Project Management for Web and Digital Media |
| **Edition** | 4th |
| **Publisher** | Addison Wesley |
| **ISBN** | 0321436938 |

| Course Material | Book |
|---|---|
| **Author** | Chapman, C, Chapman, N., |
| **Publishing Year** | 2009 |
| **Title** | Digital Multimedia |
| **Subtitle** | |
| **Edition** | 3rd |
| **Publisher** | John Wiley & Sons |
| **ISBN** | 0470512164 |

| Course Material | Book |
|---|---|
| **Author** | Bocij, P., Chaffey, D., Greasley, A., Hickie, S., |
| **Publishing Year** | 2008 |
| **Title** | Business Information Systems, Technology |
| **Subtitle** | Development and Management for the E- Business |
| **Edition** | |
| **Publisher** | Prentice Hall |
| **ISBN** | 027371662X |

**Notes**

This module introduces students to a range of practical topics associated with the development of computing solutions, and enables them to develop the skills to use the appropriate tools and techniques in these selected areas.