

## Liverpool John Moores University

Title: ENTERPRISE SYSTEMS DEVELOPMENT  
Status: Definitive  
Code: **5044COMP** (115955)  
Version Start Date: 01-08-2011

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

Team	Leader
Mark Taylor	Y

**Academic Level:** FHEQ5      **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
Tutorial	48.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Group report covering pre-analysis phase objectives and deliverables.	40.0	
Report	AS2	Group report to produce a logical and physical design for a given problem scenario.	60.0	

### Aims

*To provide an understanding of the underlying principles of systems analysis and design.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Apply the underlying principles of systems analysis and design.
- 2 Apply different systems analysis and design methodologies.
- 3 Differentiate between the logical and physical design process.
- 4 Apply the concepts of object orientation within software system analysis and design.

### Learning Outcomes of Assessments

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

Pre-analysis	1	2
Problem scenario	3	4

### Outline Syllabus

*Process overview: Traditional and contemporary systems development lifecycles and management including agile approaches such as DSDM and XP.*

*Pre-analysis phase: Investigation, information gathering, feasibility studies.*

*Analysis phase: Requirements capture, prototyping, analysis and specification (structured techniques such as DFDs, ERM; object-oriented techniques such as UML, use cases, activity diagrams and static structure class diagrams).*

*Design phase: Object-oriented analysis and design; Logical design; Physical design; Architectural design (component diagrams, deployment diagrams); Usability issues: HCI and prototyping.*

*Post implementation phases: System testing, installation, training and maintenance.*

### Learning Activities

Formal theory will be introduced via lectures and practical knowledge will be acquired via tutorials and coursework.

### References

<b>Course Material</b>	Book
<b>Author</b>	Avison, D. and Fitzgerald, G.
<b>Publishing Year</b>	2006
<b>Title</b>	Information Systems Development
<b>Subtitle</b>	Methodologies, Techniques and Tools
<b>Edition</b>	4th Edition
<b>Publisher</b>	McGraw Hill
<b>ISBN</b>	07-711417-6

<b>Course Material</b>	Book
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<b>Author</b>	Britton, C. and Doake, J.
<b>Publishing Year</b>	2005
<b>Title</b>	Software System Development
<b>Subtitle</b>	A Gentle Introduction
<b>Edition</b>	4th Edition
<b>Publisher</b>	McGraw Hill
<b>ISBN</b>	9780077111038

<b>Course Material</b>	Book
<b>Author</b>	Hoffer, J.A.
<b>Publishing Year</b>	2008
<b>Title</b>	Modern Systems Analysis and Design
<b>Subtitle</b>	
<b>Edition</b>	5th Edition
<b>Publisher</b>	Prentice Hall
<b>ISBN</b>	9780132240765

<b>Course Material</b>	Book
<b>Author</b>	Motiwalla, L. and Thompson, J.
<b>Publishing Year</b>	2008
<b>Title</b>	Enterprise Systems for Management
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Prentice Hall
<b>ISBN</b>	013233531X

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## Notes

This module explores the theories and practical application of systems analysis and design techniques with particular emphasis on object-oriented analysis and design and its role in software development for the modern enterprise.