

## Liverpool John Moores University

Title: INFORMATION SYSTEMS ANALYSIS AND DESIGN  
Status: Definitive  
Code: **5113COMP** (121235)  
Version Start Date: 01-08-2021

Owning School/Faculty: Computer Science and Mathematics  
Teaching School/Faculty: Computer Science and Mathematics

Team	Leader
Mark Taylor	Y

**Academic Level:** FHEQ5      **Credit Value:** 20      **Total Delivered Hours:** 55  
**Total Learning Hours:** 200      **Private Study:** 145

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	22
Tutorial	33

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	System Analysis and Design	100	

### 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 systems analysis and design.

## Learning Outcomes of Assessments

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

System Analysis and Design	1	2	3	4
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## Outline Syllabus

*Process overview: Traditional and contemporary systems development lifecycles and management including waterfall, prototyping and 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 class diagrams).*

*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.

## 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.